Manitoba
Science, Technology, Energy and Mines

Sciences, Technologie, Énergie et Mines
Manitoba

Annual Report 2007-2008

Rapport annuel 2007-2008

Manitoba

MINISTER OF
SCIENCE, TECHNOLOGY, ENERGY AND MINES

Legislative Building
Winnipeg, Manitoba CANADA
R3C 0V8

September 15, 2008

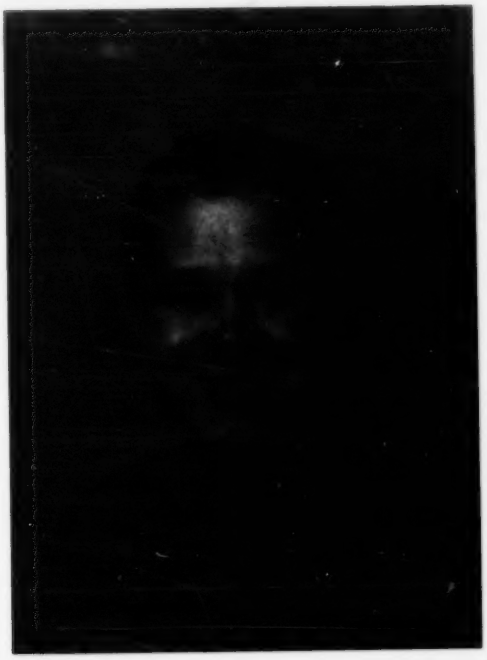
His Honour the Honourable John Harvard, P.C., O.M.
Lieutenant Governor of Manitoba
Room 235, Legislative Building
Winnipeg, Manitoba
R3C 0V8

Your Honour:

I am pleased to present the Annual Report for the Department of Science, Technology, Energy and Mines for the fiscal year ending March 31, 2008.

Respectfully submitted,

Jim Rondeau
Minister



MINISTER OF
SCIENCE, TECHNOLOGY, ENERGY AND MINES

Legislative Building
Winnipeg, Manitoba CANADA
R3C 0V8

15 septembre 2008

Son Honneur l'honorable John Harvard, C.P., O.M.
Lieutenant-gouverneur du Manitoba
Palais législatif, bureau 235
Winnipeg (Manitoba) R3C 0V8

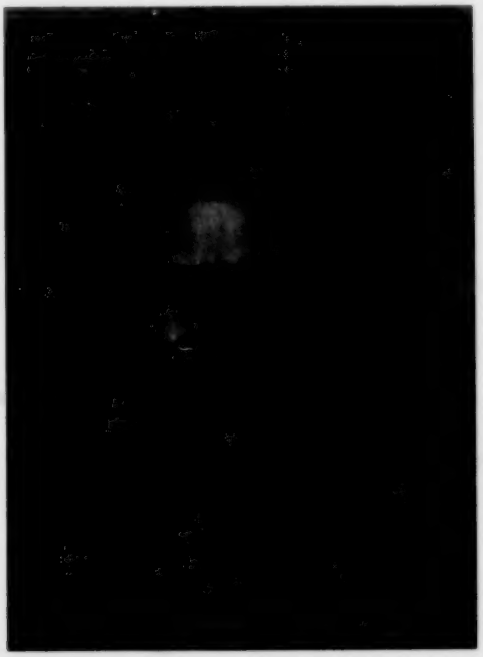
Monsieur le Lieutenant gouverneur,

J'ai le plaisir de présenter à Votre Honneur le rapport annuel du ministère des Sciences, de la Technologie, de l'Énergie et des Mines pour l'exercice se terminant le 31 mars 2008.

Je vous prie d'agréer, Monsieur le Lieutenant-gouverneur, l'expression de mon profond respect.

Le ministre,

Jim Rondeau



Manitoba

Science, Technology, Energy and Mines

Deputy Minister
Room 349, Legislative Building, Winnipeg, MB, R3C 0V8
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September 24, 2008

Honourable Jim Rondeau
Minister of Science, Technology, Energy and Mines
Room 333, Legislative Building
Winnipeg MB R3C 0V8

Dear Minister Rondeau:

I have the honour of presenting the Annual Report for the Department of Science, Technology, Energy and Mines for the period April 1, 2007 to March 31, 2008.

The mission of the department is to help all Manitobans thrive by fostering innovation, enabling critical partnerships and networks, and continuously transforming service delivery.

The department has undertaken many activities in collaboration with our partners and stakeholders. I have profiled below, a few accomplishments that are a result of the activities:

- In 2007, petroleum industry spending in Manitoba reached $361 million while producing a record 1,277,066.1 cubic metres of oil (8.04 million barrels) having a total value of approximately $613 million. A total of 44 exploratory and 280 development wells were drilled with a drilling success rate of 95%. Provincial revenue from taxes, royalties, and administration of Crown owned oil and gas rights and fees added $17.3 million to the Provincial Treasury for 2007/08.
- Canadian Natural Resources Ltd. in partnership with ATCO Midstream, completed the province's first gas conservation project gathering natural gas from and oil production facility in the Pierson area that was previously flared and transporting it to a gas plant in southeast Saskatchewan. The elimination of flaring resulted in a reduction in greenhouse gas emissions of 18,500 tonnes of CO2 equivalent. The Petroleum Branch has hired a consultant to study the technical and economic feasibility of using CO2 to enhanced oil recovery from Manitoba's oils pools, while at the same time capturing and storing the CO2 in the oil pools.
- The annual Manitoba Mining and Minerals Convention hosted 1000 industry participants, reflecting the mining sector's vibrant presence in Manitoba. The Convention provided a venue for participants to learn the latest government geological information releases, exploration and mining services and business opportunities. The fourth annual Aboriginal Mining Workshop was held as part of the convention. The workshop focused on how communities can benefit from mineral exploration activity in their regions.

- Under the Mineral Exploration Assistance Program (MEAP), 90 applications were approved that proposed over $65 million in exploration expenditures.
- New geological mapping in the northern Superior province and Thompson Nickel Belt has provided important information on the potential for nickel, copper-zinc and gold deposits in the Thompson region and northern Superior greenstone belts. Geoscience studies in the Bissett and Lynn Lake areas continue to provide data on precious and base metal deposits near those communities, while collaborative initiatives with the Geological Survey of Canada involved a range of studies in the Thompson and Flin Flon regions.
- A significant portion of Manitoba Geological Survey work in 2007 was conducted as part of the Geological Survey of Canada's (GSC) five year Targeted Geoscience Initiative (TGI-3). TGI-3 was launched in 2005 and is an integrated, multidisciplinary geoscience study intended to aid in the discovery of new reserves of base metals in the established mining communities of west-central Manitoba and east-central Saskatchewan. The project was developed through joint provincial-federal-industry consultation and is delivered as a fully integrated partnership that includes the minerals industry, researchers from Canadian and American universities, the Manitoba Geological Survey (MGS), the Saskatchewan Geological Survey (SGS) and the GSC.
- Manitoba Geological Survey mineral-education outreach initiatives included the Manitoba Mining and Minerals Convention Schools Program, National Engineering and Geoscience Week, Earth Science Week and Provincial Mining Week. Despite inclement weather, the outdoor Provincial Mining Week event drew more than 2500 visitors. The MGS partnered with the Manitoba Children's Museum for the first time to help celebrate the museum's Earth Science Week; 158 people participated in the MGS-sponsored activities. MGS staff also delivered mining and geology presentations to Aboriginal communities at Fox Lake Cree Nation, Northlands First Nation and the Nelson House Resource Management Board, as well as Wolseley School, the Winnipeg Rock and Mineral Club and the Mineral Society of Manitoba.
- The Department spent over $5.3 million in 2007-08 under the Manitoba Orphaned/Abandoned Mine Site Rehabilitation Program. The rehabilitation work carried out under the program addressed critical safety and environmental issues at Sherridon, Lynn Lake, God's Lake and Ruttan. Eleven high hazard sites in the Bissett/Whiteshell area were also cleaned up.
- Under the Pits and Quarry Rehabilitation Program, in fiscal year 2007/08 approximately $1.9 million was contributed to the Quarry Rehabilitation Fund, with over 86 rehabilitation projects being completed at a cost of $1.3 million. This is a highly successful program that contributes to the economy of small rural communities by providing employment opportunities to local people.
- The Department entered into a contract with Pacific Geotech Systems to undertake a feasibility assessment and solution definition for a new Integrated Mining Registry System. The new system will streamline the administration of mineral dispositions, enhance service delivery, allow clients to access a host of e-business services and introduce on-line map staking.
- Husky Energy completed their $200 million, 130 million litre ethanol plant in Minnedosa. The facility is now producing ethanol to help meet Manitoba's ethanol mandate, which came into affect January 1, 2008.
- Manitoba Hydro issued an RFP (Request for Proposals) for 300 MW of wind generated energy as the 2nd step in moving towards the Province's goal of 1000 MW of wind over a decade (St. Leon was the first step).

- Construction commenced on three biodiesel production facilities in Arborg, Beausejour and Winnipeg.
- The Manitoba geothermal market grew by approximately 950 installations resulting in approximately $35M of direct industry sales. STEM committed over $320.0 in support for 3 years to the Manitoba Geothermal Energy Alliance, primarily to support their efforts to deliver a geothermal quality assurance program.
- Establishment of province wide low income energy efficiency programs.
- Implementation of the Green Building Policy for all government funded buildings.
- Engaged in both internal and external discussions, including workshops at a major climate and green economy conference in Fall 2007, to inform the creation of *Beyond Kyoto – Manitoba's Green Future*, an updated climate change action plan for Manitoba. Envisioned as a follow-up to *Kyoto and Beyond – A plan of action to meet and exceed Manitoba's Kyoto targets*, the updated plan will outline over sixty initiatives to be undertaken locally to ensure Manitoba reduces greenhouse gas (GHG) emissions to 6% below 1990 levels by 2012.
- Coordinated the development of a draft climate change and emissions reduction Bill for Manitoba, *The Climate Change and Emissions Reductions Act*, which will legislate the Kyoto target of 6% below 1990 levels by 2012. The Bill was tabled in Spring 2008.
- The department established the Manitoba Network Task Force to advance the goal of connecting all communities in Manitoba with high-speed or broadband services by the year 2010. Creation of the Manitoba Network is a key component of Manitoba's Broadband Strategy.
- Partner Program (bundling of services) - 34 out of 37 school divisions are now participating in the MERLIN Partner Program representing 96% of the full-time equivalents teachers (FTEs) in the Province. A Bulk Hardware Purchasing Program has been added to this bundle. A second Partner Program has been customized for independent schools effective July 1, 2007 which is now at almost 50% participation. Future growth is expected.
- MERLIN has done consulting engagements with at least 27 school divisions in the last fiscal year.
- Developed a process (Program Requirement Enablement Process) to prepare Programs for the rapid transformation of government services enabled by technological and business process change which will deliver more efficient and effective government services.
- Expanded the entrepreneurial assistance website, BizPal, to the cities of Winnipeg and Brandon. Individuals can now get a list of permits required by all three levels of government to establish a new business, or expand operations in Manitoba's largest urban centres.
- Green Manitoba successfully orchestrated a province-wide e-waste collection campaign supported by multiple stakeholders. Manitoba's 2007 Electronic Waste Round-up diverted more than 305,000 kilograms (675,000 pounds) of electronic waste from provincial landfills.
- Green Manitoba coordinated establishment of a new industry-managed tire recycling program in Manitoba. On April 1, 2008, Tire Stewardship Manitoba assumed responsibility for scrap tire collection and processing throughout the province.
- Based on the recommendations of the Manitoba Health Research Council's (MHRC) strategic plan, STEM increased funding to the Council from $1.95 million to $5.1 million in 2007/08. With the increased funding, MHRC is now in a position to provide additional grants and awards to local researchers and trainees, enhancing its program complement.

- In 2007/08, STEM launched a Science and Technology International Collaboration Fund to support collaborative research and development projects involving Manitoba researchers and those in other jurisdictions. Five biotechnology collaboration projects, totaling $2.5 million, with the Australian states of South Australia and Victoria were supported in 2007/08 through this fund.
- In recognition of the continued growth of its globally-competitive biotechnology industry, the province hosted the launch of National Biotechnology Week in 2007/08.
- STEM provided $288,000 in 2007/08 to 16 Manitoba companies for the development, production, and marketing of interactive digital media products. There are in excess of 230 digital media companies operating in Manitoba, a growth rate of 1,850 per cent during the past three years.
- The department is committed to the Principles and Guidelines set out in the Sustainable Development Act. Departmental initiatives support sustainable development by minimizing waste through the efficient use of office supplies and recycling, increased utilization of the internet to communicate and disseminate information to internal and external clients, delivery of a variety of seminars and implementing audio conferencing.

The department will continue with implementing innovative initiatives and strategic planning that will contribute to Manitoba's success.

Respectfully submitted,

John Clarkson
Deputy Minister

Manitoba

Science, Technology, Energy and Mines
Deputy Minister
Room 349, Legislative Building, Winnipeg, MB, R3C 0V8
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Le 24 septembre 2008

Monsieur Jim Rondeau
Ministre des Sciences, de la Technologie, de l'Énergie et des Mines,
Palais législatif, bureau 333
Winnipeg (Manitoba) R3C OV8

Monsieur le ministre,

J'ai l'honneur de vous présenter le rapport annuel du ministère des Sciences, de la Technologie, de l'Énergie et des Mines pour la période du 1er avril 2007 au 31 mars 2008.

La mission du ministère est d'aider les Manitobains à prospérer en encourageant l'innovation, en permettant la mise en place de partenariats et de réseaux essentiels et en transformant continuellement la prestation de services.

Le ministère a entrepris plusieurs activités en collaboration avec ses partenaires et les groupes intéressés. J'ai décrit ci-dessous quelques réalisations qui résultent de ces activités :

- En 2007, l'industrie pétrolière a dépensé 361 millions de dollars au Manitoba et a produit un volume record de 1 277 066,1 mètres cubes de pétrole (8,04 millions de barils) ayant une valeur totale approximative de 613 millions de dollars. En tout, 44 forages d'exploration et 280 puits de développement ont été forés, avec un taux de succès de 95%. Les recettes provinciales tirées des taxes, des redevances et de l'administration des droits pétroliers et gaziers de la Couronne ont rapporté 17,3 millions de dollars supplémentaires au Trésor provincial en 2007-2008.
- Canadian Natural Resources Ltd., en collaboration avec ATCO Midstream, a achevé le premier projet de conservation de gaz naturel de la province en recueillant le gaz de torche (qui était autrefois brulé) provenant d'installations pétrolières de la région de Pierson et en le transportant à une usine à gaz du sud-est de la Saskatchewan. L'élimination du brûlage des gaz de torche a permis de réduire les émissions de gaz à effet de serre de 18 500 tonnes d'équivalent-CO_2. La Direction des ressources pétrolières a engagé un expert afin d'étudier la faisabilité technique et économique de l'utilisation de CO_2 pour améliorer la récupération de pétrole dans les gisements du Manitoba, tout en capturant et en entreposant le CO_2 de ces gisements.
- Le Congrès annuel manitobain sur les mines et les minéraux a accueilli 1000 participants de l'industrie, ce qui témoigne de la présence vibrante du secteur minier au Manitoba. La convention a permis aux participants de prendre connaissance des toutes dernières publications d'information géologique du gouvernement et de se renseigner

sur les services de prospection et d'exploitation minières et sur les possibilités d'affaires. Le quatrième atelier annuel sur l'exploitation minière à l'intention des Autochtones a eu lieu pendant le Congrès. Il a mis l'accent sur la manière dont les collectivités peuvent bénéficier des activités d'exploration minière qui ont lieu dans leur région.

- Dans le cadre du Programme d'aide à l'exploration minière, 90 demandes de financement ont été approuvées, ce qui représentait plus de 65 millions de dollars en dépenses d'exploration.
- Une nouvelle cartographie géologique du nord de la province du lac Supérieur et de la ceinture nickélifère de Thompson a permis de réunir des renseignements importants sur le potentiel de gisements de nickel, de cuivre-zinc et d'or dans la région de Thompson et dans la ceinture de roches vertes du nord de la province du lac Supérieur. Les études géoscientifiques de la région de Bissett et de Lynn Lake continuent de fournir des données sur les gisements de métaux communs et précieux près de ces localités et des initiatives menées en collaboration avec la Commission géologique du Canada ont permis d'entreprendre diverses études dans les régions de Thompson et de Flin Flon.
- Une grande partie du travail de levés géologiques du Manitoba accompli en 2007 a été effectué dans le cadre de l'Initiative géoscientifique ciblée (IGC-3) de cinq ans de la Commission géologique du Canada. Cette initiative, lancée en 2005, est une étude géoscientifique multidisciplinaire intégrée dont l'objectif est d'aider à la découverte de nouvelles réserves de métaux communs dans les collectivités minières établies du centre-ouest du Manitoba et du centre-est de la Saskatchewan. Le projet a été élaboré dans le cadre d'une consultation mixte d'intervenants fédéraux, provinciaux et industriels. Sa mise en œuvre repose sur un partenariat entièrement intégré comprenant l'industrie des minéraux, des chercheurs d'universités canadiennes et américaines, le service des Levés géologiques du Manitoba, la Saskatchewan Geological Survey et la Commission géologique du Canada.
- Les initiatives éducatives de sensibilisation à l'industrie minière et aux minéraux du service des Levés géologiques du Manitoba ont compris le programme scolaire du Congrès manitobain sur les mines et les minéraux, la Semaine nationale du génie et des géosciences, la semaine des sciences de la Terre et la semaine provinciale du développement minier. Malgré des conditions météorologiques défavorables, les activités en plein air de la semaine provinciale du développement minier ont attiré plus de 2 500 visiteurs. Le service des Levés géologiques du Manitoba s'est associé pour la première fois au Manitoba Children's Museum afin de l'aider à célébrer la semaine des sciences de la Terre du musée. Au total, 158 personnes ont participé aux activités commanditées par le service des Levées. Le personnel de ce service a également offert des présentations sur la géologie et l'exploitation minière dans des écoles et des communautés autochtones, notamment à des membres de la Nation des Cris de Fox Lake, de la Première nation des Dénés Northlands du Manitoba et du Nelson House Resource Management Board, ainsi qu'à des élèves de l'école Wolseley, à Winnipeg, au Winnipeg Rock and Mineral Club et à la Mineral Society of Manitoba.
- Le ministère a dépensé plus de 5,3 millions de dollars en 2007-2008 dans le cadre du Programme de restauration des sites miniers abandonnés et orphelins du Manitoba. Les travaux de restauration effectués dans le cadre de ce programme ont permis de remédier à des problèmes de sécurité et d'environnement importants sur les sites de Sherridon, Lynn Lake, God's Lake et Ruttan. Onze sites à risques élevés ont également été nettoyés dans la région de Bissett/Whiteshell.
- Dans le cadre du Programme de remise en état des carrières et des sablières, environ 1,9 million de dollars a été versé au cours de l'exercice 2007-2008 dans le Fonds de remise en état et plus de 86 projets de restauration ont été menés à bien, pour un coût

total de 1,3 million de dollars. Ce programme très fructueux contribue à l'économie des petites collectivités rurales en offrant des possibilités d'emploi à la population locale.

- Le ministère a signé un contrat avec Pacific Geotech Systems afin d'entreprendre une étude de faisabilité et de définir des solutions en vue de créer un nouveau système de registre minier intégré. Ce nouveau système permettra de simplifier l'administration des aliénations minières, d'améliorer la prestation de services, de donner aux clients la possibilité d'accéder à un hôte offrant des services d'affaires électroniques et d'introduire le jalonnement de cartes en ligne.
- Husky Energy a terminé la construction de son usine de fabrication d'éthanol à Minnedosa, un projet de 200 millions de dollars d'une capacité de 130 millions de litres. Cette usine, à présent opérationnelle, contribuera à l'application des mesures provinciales relatives à l'utilisation d'éthanol, qui sont entrées en vigueur le 1er janvier 2008.
- Manitoba Hydro a lancé une demande de propositions pour un projet de 300 mégawatts d'énergie éolienne dans le cadre d'une deuxième vague de construction d'éolienne (la première vague était celle de Saint-Léon) afin d'atteindre l'objectif de la province de 1 000 MW en 10 ans.
- La construction de trois usines de production de biodiésel situées à Arborg, à Beauséjour et à Winnipeg a comencé.
- Le marché des installations géothermiques a augmenté d'environ 950 installations au Manitoba, ce qui a aboutit à environ 35 millions de dollars en ventes directes pour l'industrie. Le ministère des Sciences, de la Technologie, de l'Énergie et des Mines a affecté plus de 320 millions de dollars sur trois ans à la Manitoba Geothermal Energy Alliance, principalement afin d'appuyer ses efforts pour offrir un programme de contrôle de la qualité dans le domaine de l'énergie géothermique.
- Établissement de programmes d'efficacité énergétique pour les personnes à faible revenu dans l'ensemble de la province.
- Mise en œuvre de la politique de bâtiments écologiques.
- Le ministère est engagé dans des discussions internes et externes, et a notamment participé à des ateliers lors d'une importante conférence sur les changements climatiques et l'économie verte à l'automne 2007 afin de présenter la mise à jour du plan d'action du Manitoba sur les changements climatiques qui s'intitule à présent *Au-delà de Kyoto – Un avenir vert pour le Manitoba*. Conçu pour faire suite à *Kyoto et au-delà — Un plan d'action visant à atteindre et à dépasser les objectifs du Manitoba dans le cadre du Protocole de Kyoto*, le plan actualisé mettra en relief plus de 60 initiatives à entreprendre localement afin que les émissions de gaz à effet de serre du Manitoba puissent passer à un niveau de 6 % inférieur à celui de 1990 d'ici 2012.
- Le ministère a coordonné la rédaction d'une ébauche de projet de loi sur les changements climatiques et la réduction des émissions de gaz à effet de serre pour le Manitoba, qui permettra d'imposer l'objectif de Kyoto (6 % au dessous du niveau de 1990 d'ici 2012) par voie législative. Ce projet de loi a été déposé au printemps 2008.
- Le ministère a créé le groupe de travail sur les réseaux du Manitoba afin de se concentrer sur l'objectif de relier toutes les collectivités du Manitoba au réseau à haute vitesse ou au service à large bande d'ici l'année 2010. La création du réseau du Manitoba est un élément clé de la stratégie d'accès aux services à large bande du Manitoba.
- Programme de partenariat (offre groupée de services) – 34 des 37 divisions scolaires participent à présent au programme de partenariat du Réseaux informatiques en apprentissage et en recherche pédagogique du Manitoba (MERLIN), ce qui représente 96 % des enseignants à équivalent temps plein de la province. Un programme d'achat de matériel informatique en gros a été ajouté à cette offre groupée. Un deuxième

programme de partenariat a été adapté aux écoles indépendantes et est entré en vigueur le 1er juillet 2007. Le taux de participation est actuellement de presque 50 % et on s'attend à ce qu'il augmente.

- Les Réseaux informatiques en apprentissage et en recherche pédagogique du Manitoba a effectué des activités de consultation avec au moins 27 divisions scolaires au cours de l'exercice écoulé.
- Développement d'un processus (Processus d'opérationnalisation des programmes) afin de préparer les programmes aux transformations rapides des services du gouvernement s'appuyant sur des changements technologiques et opérationnels. Ce processus permettra d'offrir des services gouvernementaux plus efficaces et plus rentables.
- Élargissement du site Web d'assistance aux entreprises PerLE aux villes de Winnipeg et de Brandon. Les particuliers peuvent à présent obtenir une liste des permis exigés par les trois ordres de gouvernement pour lancer une nouvelle entreprise ou accroître leurs opérations dans les grands centres urbains du Manitoba.
- Manitoba vert a orchestré avec succès une campagne de collecte de déchets électroniques dans toute la province avec l'aide de nombreuses parties intéressées. Grâce à la collecte de 2007, 305 000 kilogrammes (675 000 livres) de déchets électroniques n'ont pas aboutit dans les décharges provinciales.
- Manitoba vert a coordonné la mise en place dans la province d'un nouveau programme de recyclage des pneus géré par l'industrie. Le 1er avril 2008, Tire Stewardship Manitoba a pris en charge la collecte et la transformation de pneus de rebut dans l'ensemble de la province.
- En s'appuyant sur les recommandations du plan stratégique du Conseil manitobain de la recherche en matière de santé, le ministère des Sciences, de la Technologie, de l'Énergie et des Mines a augmenté le financement alloué au Conseil, le faisant passer de 1,95 à 5,1 millions de dollars en 2007-2008. Grâce à ce financement accru, le Conseil est à présent en mesure d'offrir davantage de subventions et de bourses aux chercheurs et aux stagiaires locaux, amplifiant ainsi ce volet de son programme.
- En 2007-2008, le ministère des Sciences, de la Technologie, de l'Énergie et des Mines a lancé un Fonds de collaboration internationale pour la science et la technologie afin de soutenir les projets de recherche et de développement mettant en jeu une collaboration entre des chercheurs du Manitoba et leurs homologues d'autres pays. Ce fonds a ainsi permis de soutenir, au cours de l'exercice 2007-2008, cinq projets de biotechnologie d'un total de 2.5 millions de dollars qui ont été entrepris en collaboration avec les états australiens de l'Australie-Méridionale et de Victoria.
- Comte tenu de la croissance continue du secteur des biotechnologies au Manitoba, un secteur compétitif au niveau mondial, le lancement officiel de la Semaine nationale des biotechnologies a eu lieu au Manitoba en 2007-2008.
- Le ministère des Sciences, de la Technologie, de l'Énergie et des Mines a alloué 288 000$ en 2007-2008 à 16 entreprises manitobaines pour le développement, la production et la commercialisation de produits dans le domaine des médias numériques interactifs. Il y a plus de 230 entreprises de médias numériques au Manitoba, ce qui représente une croissance de 1 850 % du nombre d'entreprises au cours des trois dernières années.
- Le ministère s'engage à respecter les principes et les directives énoncés dans la *Loi sur le développement durable.* Les initiatives ministérielles appuient le développement durable à l'aide des mesures suivantes : la réduction des déchets grâce à l'utilisation efficace des fournitures de bureau et au recyclage, l'utilisation accrue d'Internet pour communiquer et diffuser de l'information aux clients internes et externes, l'offre de divers séminaires et la mise en œuvre de conférences téléphoniques.

Le ministère continuera de promouvoir la planification stratégique et les initiatives innovatrices qui contribueront au succès du Manitoba.

C'est avec respect, Monsieur le ministre, que je vous soumets le présent document.

Le sous-ministre,

John Clarkson

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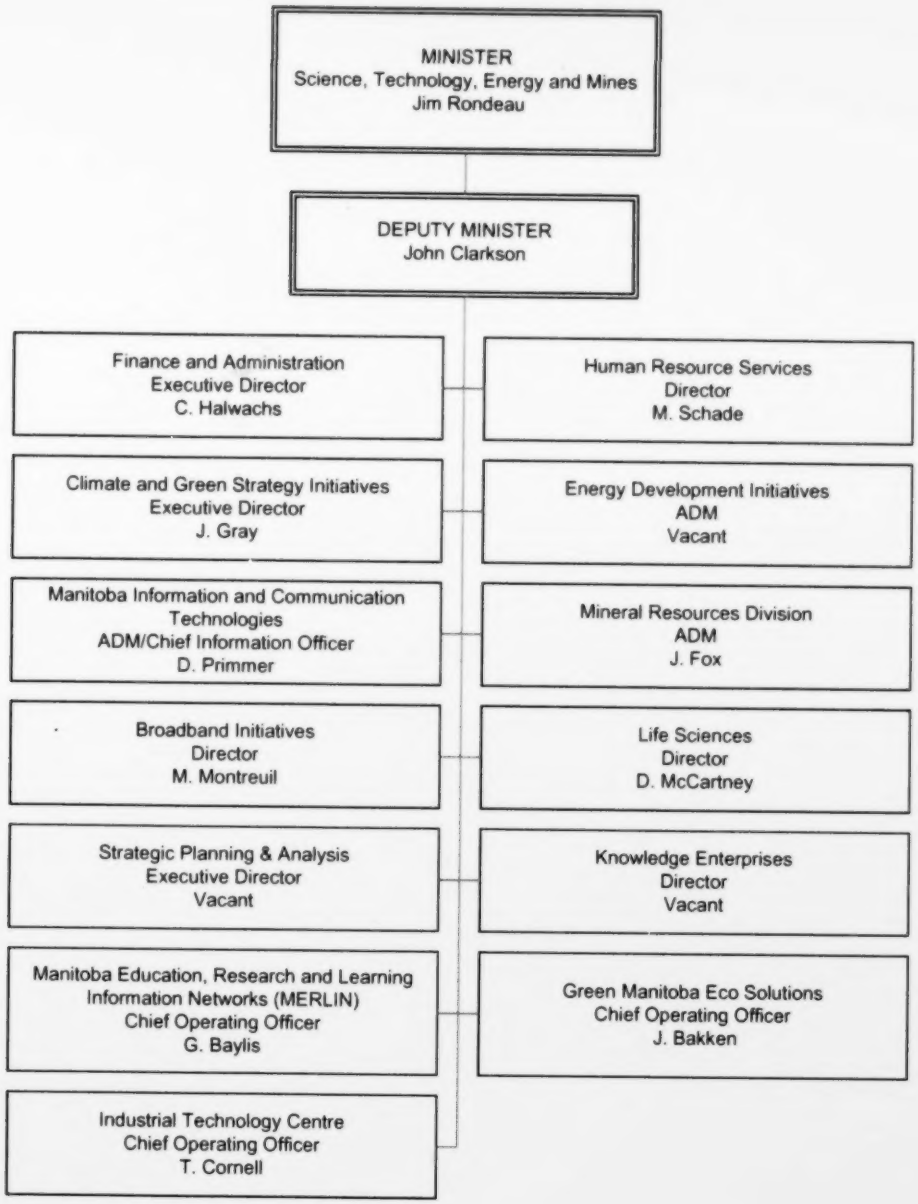
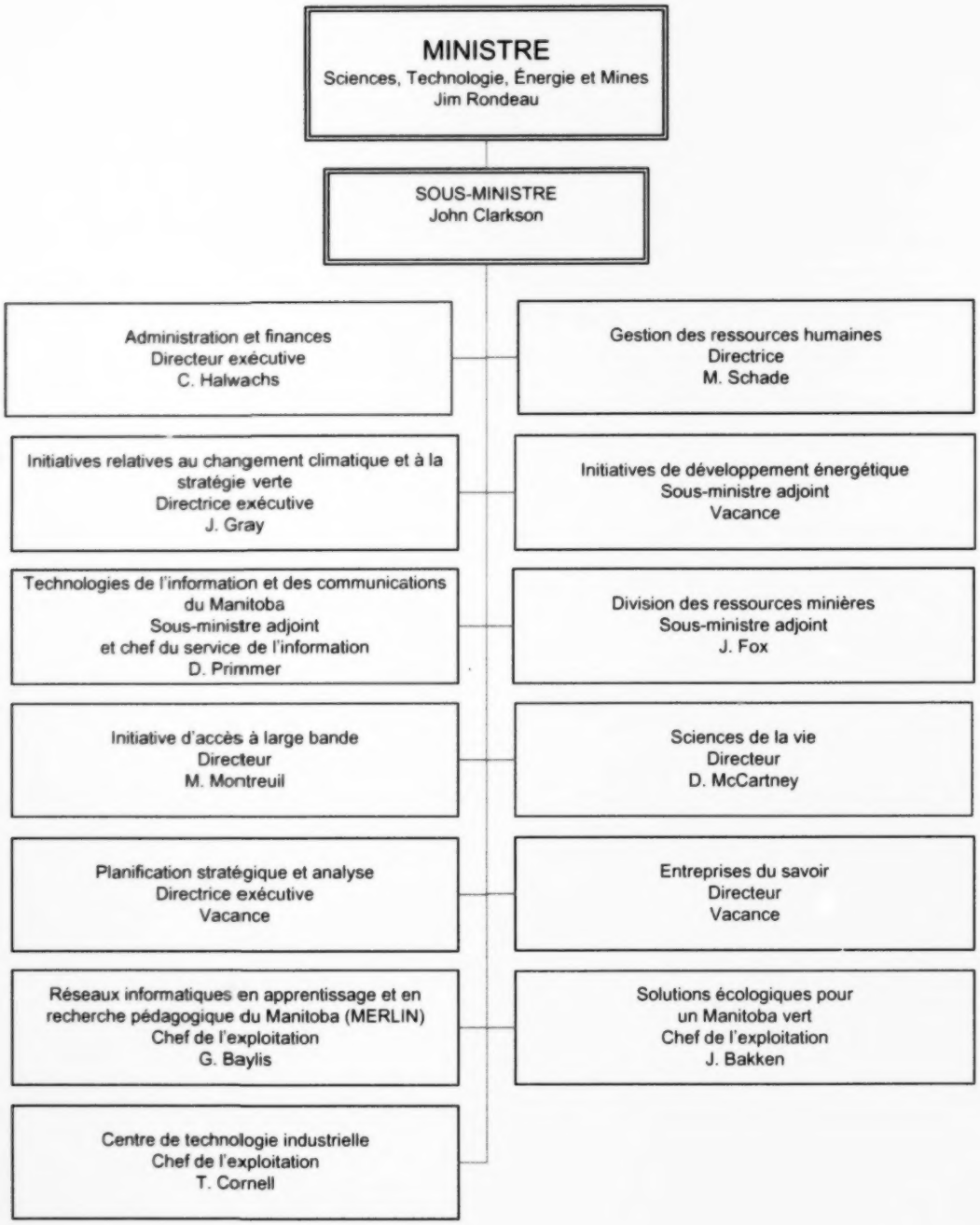
SCIENCE, TECHNOLOGY, ENERGY AND MINES
ORGANIZATION CHART
AS AT MARCH 31, 2008



SCIENCES, TECHNOLOGIE, ÉNERGIE ET MINES
ORGANIGRAMME
EN VIGUEUR À PARTIR DU 31 MARS 2008



PREFACE

REPORT STRUCTURE

The Annual Report is organized in accordance with the department's appropriation structure and the Main Estimates of Expenditure for the Province. The Report includes financial performance and variance information at the main and sub-appropriation levels and information relating to the department's objectives and results at the sub-appropriation level. The Report also includes information about associated agencies, business assistance, revenue and expenditures, a five-year comparison of expenditures and a staffing analysis.

STATUTORY RESPONSIBILITIES

The Minister of Science, Technology, Energy and Mines is responsible for the following:

The Biofuels Act	B 40
The Development Corporation Act	D 60*
The Economic Innovation and Technology Council Act	E 7
The Energy Act	E 112
The Gas Pipe Line Act	G 50
The Gas Allocation Act	G 52
The Greater Winnipeg Gas Distribution Act (S.M. 1988-89, c. 40)	-
The Manitoba Health Research Council Act	H 28
The Mines and Minerals Act	M 162
The Mining and Metallurgy Compensation Act	M 190
The Oil and Gas Act	O 34
The Oil and Gas Production Tax Act	O 37
The Property Tax and Insulation Assistance Act [Part V, and section 1 and Part VI as they relate to subjects covered under Part V	P 143
The Surface Rights Act	S 235
The Sustainable Development Act (as it relates to the Manitoba Climate Change Action Fund of the Sustainable Development Innovations Fund)	S 270
The Winter Heating Cost Control Act	W 165

As per Schedule "P", Order-In-Council 418/2006
*As per Schedule "R", Order-In-Council 44/2008

SUSTAINABLE DEVELOPMENT

The department is committed to the Principles and Guidelines set out in The Sustainable Development Act and works to incorporate them in department activities, programs and business practices.

The Principles and Guidelines of Sustainable Development are:

1. Integration of Environmental and Economic Decisions
2. Stewardship
3. Shared Responsibility and Understanding
4. Prevention
5. Conservation and Enhancement
6. Rehabilitation and Reclamation
7. Global Responsibility
8. Efficient uses of Resources
9. Public Participation
10. Access to Information
11. Integrated Decision Making and Planning
12. Waste Minimization and Substitution
13. Research and Innovation.

The Sustainable Development Procurement Goals:

1. Education, Training and Awareness
2. Pollution Prevention and Human Health Protection
3. Reduction of Fossil Fuel Emissions
4. Resource Conservation
5. Community Economic Development

ORGANIZATION

The department's 2007/2008 organization structure is illustrated in the Organization Chart, page i. The roles, responsibilities and staffing are outlined in the following information.

ROLE AND RESPONSIBLITIES

MINISTER

HONOURABLE JIM RONDEAU

DEPUTY MINISTER

JOHN CLARKSON

ROLE AND MISSION

The department will build the capacity for Manitobans to prosper through innovation, by

- creating strategic partnerships;
- encouraging investment;
- enabling the right infrastructure, and access to it;
- promoting awareness and knowledge; and
- championing critical policy development.

FOCUS

The Department was established in recognition of the following:

- ***Innovation*** is key to future economic development and ***capacity to deliver*** government initiatives;
- ***Energy, mining, petroleum, science and technology*** are critical to the further development of the Manitoba economy;
- Government's need to ***focus*** knowledge based economic development priorities; and
- ***Strengthen*** the approach to economic development.

The Department will:

- focus provincial innovation activities;
- assist in the growth and success of our science, research and technology assets;
- strengthen, develop, grow and attract knowledge-based industries;
- focus government information technology requirements;
- build community based partnerships through connectivity;
- focus government climate change implementation plans;
- strategically develop Manitoba's energy and mineral resources, in co-operation with public and private sectors;
- support innovation in communities and schools;
- link response to climate change with innovation and economic success; and
- link government's own IT activities with innovation and economic development.

The Department will work collaboratively with business, individuals, government departments and communities to:

- strengthen their capacity to succeed;
- enhance the competencies they need to prosper;
- raise their profile locally, nationally and internationally; and
- foster an environment that supports sustainable economic growth.

Some of the immediate and short-term priorities for the Department are:

- create an environment conducive to the development of renewable energy technologies;
- lead coordinated development and action on the provincial implementation of Manitoba's Climate Change Plan;
- optimize community participation and benefits from upcoming Manitoba Hydro development projects;
- optimize value for sale of hydro power to other jurisdictions;
- maximize spin-off opportunities related to new renewable energy;
- facilitate early development of critical infrastructure centres in which the province has invested;
- create an environment which ensures Manitoba's life sciences cluster in the health, agri-food and environmental sectors remains globally competitive;
- facilitate development and growth of industry associations, particularly in the information communication and technology (ICT) and life sciences sectors;
- create an environment conducive to investment in Manitoba's technology businesses;
- help Manitobans maximize opportunities from connectivity by: expanding the number of communities with access to networks, increasing bandwidth, increasing the number of computers available to communities and enhancing the development of local content;
- seek improved Federal-Provincial research partnering support;
- continue to facilitate increased capacity at Manitoba research institutions;
- leverage and co-ordinate the government's investment in ICT to ensure best value from investment and maximum economic and community development opportunities;
- continue to develop strategies to safeguard information;
- provide ICT planning, development and operational activities that support the major strategic directions of government as identified through departmental plans;
- strive to collaborate and share assets and approaches between departments and jurisdictions, in order to reduce duplication, improve service levels, obtain best value from assets and ultimately reduce expenditures; and
- seek strategies to improve the ease and quality of Manitobans' access to government information, programs and services.
- increase the investment level for mineral and petroleum resources in Manitoba;
- continue to develop the geoscientific knowledge base of the Province and the effectiveness of exploration activities in both established mining areas and in frontier areas;
- identify the location, ownership, inspection history, and status of all existing orphaned and abandoned mine sites in Manitoba

To achieve its mission, the department is organized in four divisions:

ADMINISTRATION AND FINANCE DIVISION provides for the executive management, planning and control of departmental policies and programs; administrative support is provided through the Department of Competitiveness, Training and Trade in the areas of human resource services, finance and administration and management information systems.

ENERGY, CLIMATE CHANGE AND GREEN STRATEGY INITIATIVES develops and implements energy development initiatives, climate change initiatives and economic development strategies involving hydro-electric resources and alternate energy development opportunities; includes developing, monitoring and coordinating the implementation of energy and climate change policies and initiatives and related provincial programs.

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT functions as the government's primary focus for business development services to industry and communities in the areas of life sciences, knowledge enterprises, technology and infrastructure to support economic growth and stimulate employment; develops strategic plans, business plans and provides research, analysis and evaluation services; develops, analyzes and communicates policies related to innovation, research, and development, technology and telecommunications; oversees the implementation of the Manitoba Centres of Excellence Fund and the Manitoba Research and Innovation Fund; provides a coordinating function for all research, innovation, science and technology initiatives in government; facilitates economic development in Manitoba through the provision of industrial technology services; provides funding for health research initiatives and; provides distance education technology services for the provincial education systems.

MANITOBA INFORMATION AND COMMUNICATION TECHNOLOGIES is responsible for positioning information & communications technologies to support program delivery within the Government of Manitoba and broader public sector; develops key information and communication technology (ICT) strategies, policies, standards and business processes to optimize the delivery of core ICT functions in support of service delivery goals; provides an information and communication technology environment within government where appropriate technologies are fully integrated with service delivery requirements; provides analytical framework for review and approval of all ICT plans, projects and expenditures; and develops a service relationship with stakeholders to ensure that service strategies are aligned with government's program and service priorities.

THE MINERAL RESOURCES DIVISION promotes wise land management and environmentally sustainable economic development in the province based on Manitoba's mineral and petroleum resources; provides authoritative documentation of the province's mineral and petroleum endowment and development potential; delivers mineral incentive programs; administration of legislation governing the disposition of mineral and petroleum rights, exploration, development and production of Manitoba's mineral and petroleum resources and, the rehabilitation of mines, quarries and abandoned petroleum sites; provides for the resolution of disputes between surface and/or mineral rights holders with respect to accessing minerals including oil and gas.

AVANT-PROPOS

STRUCTURE DU RAPPORT

La présentation du rapport annuel reflète la structure des crédits du ministère et le Budget des dépenses de la Province. Le rapport contient des renseignements sur les postes principaux et secondaires du budget en ce qui concerne le rendement financier et les écarts par rapport aux prévisions, ainsi que des renseignements sur les postes secondaires en ce qui concerne les objectifs du ministère et les résultats obtenus. Il présente en outre des renseignements sur les organismes associés, le soutien aux entreprises, les recettes et les dépenses, ainsi qu'une récapitulation quinquennale des dépenses et de la dotation en effectif.

RESPONSABILITÉS LÉGISLATIVES

Le ministère des Sciences, de la Technologie, de l'Énergie et des Mines veille à l'application des lois suivantes :

Loi sur les biocarburants	B 40
Loi sur la Société de développment	D 60*
Loi sur le Conseil de l'innovation économique et de la technologie	E 7
Loi sur l'énergie	E 112
Loi sur les gazoducs	G 50
Loi sur la répartition du gaz	G 52
Loi sur la distribution du gaz dans la conurbation de Winnipeg (L.M. 1988-89, c. 40)	-
Loi sur le Conseil manitobain de la recherche en matière de santé	H 28
Loi sur les mines et les minéraux	M 162
Loi sur l'indemnisation consécutive à l'exploration minière ou métallurgique	M 190
Loi sur le pétrole et le gaz naturel	O 34
Loi de la taxe sur la production de pétrole et de gaz	O 37
Loi sur l'aide en matière de taxes foncières et d'isolation thermique des résidences [partie V, et article 1 et partie VI en ce qui concerne les sujets traités dans la partie V]	P 143
Loi sur les droits de surface	S 235
Loi sur le développement durable (en fonction de sa relation avec le Fonds d'action sur le changement climatique du Manitoba du Fonds des innovations de développement durable)	S 270
Loi sur la limitation des frais de chauffage en hiver	W 165

Selon l'annexe « P » du décret 418/2006
*Selon l'annexe « R » du décret 44/2008

DÉVELOPPEMENT DURABLE

Le ministère veille à se conformer aux principes et aux directives énoncés dans la *Loi sur le développement durable* et s'efforce de les intégrer dans ses activités, ses programmes et ses pratiques.

Principes et directives de développement durable :

1. Intégration des décisions économiques et environnementales
2. Supervision de la gestion de l'environnement
3. Responsabilité partagée et compréhension
4. Prévention
5. Conservation et promotion
6. Récupération et remise en état
7. Responsabilité planétaire
8. Utilisation efficace des ressources
9. Participation du public
10. Accès à l'information
11. Prise de décision et planification intégrées
12. Réduction et remplacement des déchets
13. Recherche et innovation

Objectifs de développement durable en matière d'approvisionnement :

1. Éducation, formation et sensibilisation
2. Prévention de la pollution et protection de la santé humaine
3. Réduction des émissions de combustibles fossiles
4. Conservation des ressources
5. Développement économique communautaire

ORGANISATION

L'organigramme, qui se trouve à la page i, reflète la structure organisationnelle du ministère pendant l'exercice 2007/2008. L'information qui suit porte sur le rôle et les responsabilités de ce ministère ainsi que sur la dotation en personnel.

RÔLE ET RESPONSABILITÉS

MINISTRE

MONSIEUR JIM RONDEAU

SOUS-MINISTRE

MONSIEUR JOHN CLARKSON

RÔLE ET MANDAT

Le ministère donnera aux Manitobains et Manitobaines la possibilité de prospérer au moyen de l'innovation, en :

- créant des partenariats stratégiques;
- encourageant des investissements;
- créant l'infrastructure nécessaire et en y fournissant l'accès;
- encourageant l'éducation et le savoir;
- favorisant l'élaboration de politiques essentielles.

INTÉRÊT

Le ministère a été créé en reconnaissance de ce qui suit :

- ***l'innovation*** est la clé du développement économique futur et de ***la capacité de mener à bien*** les initiatives gouvernementales;
- les secteurs ***de l'énergie, des mines, du pétrole, des sciences et de la technologie*** sont essentiels à la prospérité économique du Manitoba;
- le gouvernement doit ***faire converger*** ses priorités en matière de développement économique basé sur le savoir;
- le gouvernement doit ***renforcer*** l'approche au développement économique.

Le ministère :

- polarisera les activités provinciales liées à l'innovation;
- contribuera à la croissance et au succès de nos atouts dans les secteurs de la science, de la recherche et de la technologie;
- renforcera, développera, fera croître et attirera des entreprises fondées sur le savoir;
- fera converger les besoins du gouvernement en matière de technologie de l'information;
- créera des partenariats dans la collectivité grâce à la connectivité;
- dirigera les plans de mise en œuvre du gouvernement liés au changement climatique;
- mettra en valeur, de manière stratégique, les ressources énergétiques et minérales du Manitoba en collaboration avec les secteurs public et privé;
- soutiendra l'innovation dans les collectivités et les écoles;
- fera le lien entre la réponse au changement climatique d'une part et l'innovation et le succès économique, d'autre part;
- fera le lien entre les activités liées aux technologies de l'information du gouvernement d'une part et l'innovation et le développement économique, d'autre part.

Le ministère collaborera avec les entreprises, les particuliers, les autres ministères et les collectivités aux fins suivantes :

- renforcer leur capacité de réussite;
- rehausser les compétences nécessaires à leur prospérité;
- améliorer leur image aux plans local, national et international;
- favoriser l'établissement d'un milieu propice à la croissance durable de l'économie.

Parmi les priorités immédiates et à court terme du ministère, notons :

- créer un environnement propice au développement de technologies d'énergies renouvelables;
- diriger des plans d'action et de développement coordonnés relativement à la mise en œuvre provinciale du plan du Manitoba en matière de changement climatique;
- optimiser la participation communautaire et les bienfaits découlant des prochains projets de développement de Manitoba Hydro,
- optimiser la valeur de l'hydroélectricité en vue de sa vente à d'autres provinces et états;
- maximiser les possibilités découlant de l'utilisation de nouvelles énergies renouvelables;
- faciliter le développement précoce de centres d'infrastructures essentielles dans lesquels la province a fait un investissement;
- créer un environnement qui permet de s'assurer que le grand groupe d'activité des sciences de la vie du Manitoba, notamment les secteurs de la santé, de l'agroalimentaire et de l'environnement restent compétitifs au niveau mondial;
- faciliter le développement et la croissance d'associations de l'industrie, tout particulièrement dans les secteurs des technologies de l'information et des communications et des sciences de la vie;
- créer un environnement propice aux investissements dans les entreprises manitobaines œuvrant dans le domaine de la technologie;
- aider les Manitobains et Manitobaines à maximiser les bienfaits qui découlent de la connectivité en faisant en sorte que plus de collectivités aient accès aux réseaux; en agrandissant la largeur de bande, en augmentant le nombre d'ordinateurs utilisables par les collectivités et en favorisant le développement de contenus locaux;
- chercher un meilleur soutien en ce qui a trait aux partenariats de recherche fédéraux-provinciaux;
- continuer à faciliter une capacité accrue au sein des établissements de recherche manitobains;
- mettre en œuvre et coordonner les investissements du gouvernement dans le secteur des technologies de l'information et des communications afin de s'assurer qu'on en tire le meilleur profit et d'obtenir le plus d'occasions de développement économique et communautaire possible;
- continuer à élaborer des stratégies pour sauvegarder l'information;
- offrir des activités opérationnelles, de planification et de développement en matière de technologies de l'information et des communications qui appuient les objectifs stratégiques principaux du gouvernement tels qu'ils sont définis dans les plans d'action ministériels;
- s'efforcer de collaborer avec les autres ministères et administrations et de partager avec eux des ressources et des approches, afin de réduire le chevauchement d'activités, d'améliorer le niveau de service, de tirer le meilleur profit possible des ressources et, en fin de compte, de réduire les dépenses;
- chercher des stratégies pour que les Manitobains et Manitobaines aient un meilleur accès aux renseignements, aux programmes et aux services du gouvernement.
- accroître le niveau des investissements dans le secteur des ressources minières et pétrolières au Manitoba;
- continuer à accroître la base de connaissances de la province dans le domaine des sciences de la Terre et l'efficacité des activités d'exploration aussi bien dans les zones minières établies que dans des zones frontières;
- déterminer l'emplacement de tous les sites miniers abandonnés ou orphelins du Manitoba, établir qui en est propriétaire, faire l'historique des inspections qui y ont été faites et établir le statut de chacun de ces sites.

Pour mener à bien sa mission, le ministère est organisé en cinq divisions :

La *DIVISION DE L'ADMINISTRATION ET DES FINANCES* offre des services de haute direction, de planification et de contrôle des politiques et des programmes du ministère. Le soutien administratif dans les domaines des ressources humaines, des finances et de l'administration et de la gestion des systèmes d'information est fourni par le ministère de la Compétitivité, de la Formation professionnelle et du Commerce.

La DIVISION DES INITIATIVES RELATIVES À L'ÉNERGIE, AU CHANGEMENT CLIMATIQUE ET À LA STRATÉGIE VERTE élabore et met en œuvre des initiatives se rapportant au développement énergétique et au changement climatique ainsi que des stratégies de développement économique touchant les ressources hydroélectriques et les possibilités de mise en valeur d'énergies de rechange; cela inclut l'élaboration de politiques, d'initiatives et d'autres programmes provinciaux ayant trait à l'énergie et au changement climatique, ainsi que les activités de surveillance et de coordination nécessaires à leur mise en œuvre.

La DIVISION DES SCIENCES, DE L'INNOVATION ET DU DÉVELOPPEMENT DES ENTREPRISES agit comme organe central du gouvernement quant à l'offre de services de développement des entreprises à l'industrie et aux collectivités dans les domaines des sciences de la vie, des entreprises du savoir, des technologies et de l'infrastructure, afin de favoriser la croissance économique et de stimuler l'emploi; élabore des plans stratégiques et des plans d'entreprise; fournit des services de recherche, d'analyse et d'évaluation; établit, analyse et communique des politiques relatives à l'innovation, à la recherche et au développement, ainsi qu'à la technologie et aux télécommunications; veille à la mise en œuvre du Fonds pour les centres d'excellence du Manitoba et du Fonds pour la recherche et l'innovation du Manitoba; coordonne à l'échelle du gouvernement la réalisation de tous les projets dans le domaine de la recherche, de l'innovation, des sciences et de la technologie; facilite le développement économique au Manitoba en offrant des services de technologie industrielle; finance des initiatives de recherche dans le domaine de la santé; fournit des services de technologie pour l'enseignement à distance dans la province.

La *DIVISION DES TECHNOLOGIES DE L'INFORMATION ET DES COMMUNICATIONS DU MANITOBA* veille à la mise en place des technologies de l'information et des communications pour soutenir la prestation de programmes au sein du gouvernement du Manitoba et du secteur public élargi; élabore des stratégies, des politiques, des normes et des procédés administratifs clés relatifs aux technologies de l'information et des communications (TIC) afin d'optimiser l'offre de fonctions TIC de base, en vue d'atteindre les objectifs relatifs à la prestation de services; fournit un environnement au sein du gouvernement où les technologies appropriées font partie intégrante des critères de prestation de services; offre un cadre analytique pour examiner et approuver l'ensemble des plans, des projets et des dépenses se rapportant aux TIC; établit une relation de services avec les parties intéressées pour veiller à ce que les stratégies de services sont conformes aux priorités du gouvernement en ce qui a trait aux programmes et aux services.

La DIVISION DES RESSOURCES MINIÈRES favorise une gestion judicieuse des terres et un développement économique respectueux de l'environnement en fonction des ressources minières et pétrolières du Manitoba; fournit de la documentation faisant autorité sur les richesses minières et pétrolières de la province et sur les possibilités de développement de celles-ci; offre des programmes miniers incitatifs; administre des lois régissant la disposition des droits miniers et pétroliers, l'exploration, le développement et la production des ressources minières et pétrolières de la province, ainsi que la restauration des mines, des carrières et des installations pétrolières abandonnées; règle des différends entre les détenteurs des droits de surface et les détenteurs des droits miniers en ce qui concerne l'accès aux minéraux, au pétrole et au gaz naturel.

ADMINISTRATION AND FINANCE

The Administration and Finance Division comprises the Executive Support Offices and the shared Financial and Administrative Services section of Competitiveness, Training and Trade.

MINISTER'S SALARY AND EXECUTIVE SUPPORT

Executive Support includes the Offices of the Minister and Deputy Minister. The Minister provides leadership and direction to ensure the goals and objectives of the department are accomplished. The Office of the Deputy Minister provides the Minister with advice and information regarding issues and matters of concern to the department. Executive Support is responsible for providing the department with policy direction and the overall planning and co-ordination of departmental activities.

18-1(a) Minister's Salary

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Minister's Salary	42.1	1.00	31.0	11.1	
Total Expenditures	**42.1**	**1.00**	**31.0**	**11.1**	

18-1(b) Executive Support

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	423.7	6.00	442.7	(19.0)	
Total Other Expenditures	69.5		81.2	(11.7)	
Total Expenditures	**493.2**	**6.00**	**523.9**	**(30.7)**	

ADMINISTRATION AND FINANCE

FINANCIAL AND ADMINISTRATIVE SERVICES

Financial and Administrative Services is comprised of three primary components; Finance and Administration, Human Resource Services and Computer Services. The branch provides shared Financial and Administrative and Computer Services to the departments of Competitiveness, Training and Trade and Science, Technology, Energy and Mines. Human Resource (HR) Services that support Science, Technology, Energy and Mines and its SOAs' are part of the consolidated HR unit that also services the Departments of Culture, Heritage, Tourism and Sport, Finance and its SOAs, and the Office of the Auditor General.

OBJECTIVES

The objectives of Financial and Administrative Services are to: provide leadership, program direction and operational coordination to support department activities; to provide high quality, timely and customer responsive administrative, financial management, information technology and human resource services; develop and administer appropriate administrative and financial standards, policies and procedures; and to develop and maintain appropriate reporting systems to provide timely and accurate decision-making information to senior management in the departments and in central agencies through a centralized support service.

ACTIVITIES/RESULTS

Finance and Administration supports the mission and goals of the Department by:

- Processing payments and receipts;
- Providing computer business application development and support services;
- Administering and coordinating the Department's parking and pool vehicle programs;
- Providing for physical accommodations;
- Providing advisory and specialized accounting and financial management services to departmental personnel and related entities;
- Coordinating French Language services;
- Coordinating the departmental administration of the *Freedom of Information and Protection of Privacy Act* and *The Public Sector Disclosure (Whistelblower) Protections Act*;
- Managing the department's records management program and
- Providing timely, accurate and relevant information to departmental and central agency decision-makers including budgetary, cash flow and year end reporting.

Human Resource Services activities are carried out in accordance with The Civil Service Act, the Government Employees Master Agreement, Manitoba Labour Laws, and Workplace Health and Safety Legislation.

Specific activities of Human Resource Services during 2007-08 included:

Employment Equity Statistics as at Fiscal Year End

	2004-2005 Actual (%)	2005-2006 Actual (%)	2006-2007 Actual (%)	2007-2008 Actual (%)
Aboriginal	0.8	0.7	4.8	5.0
Women	49.2	48.9	39.1	40.5
Persons with Disability	1.6	1.4	4.0	3.7
Visible Minority	6.6	7.2	6.5	7.4

- The branch continues to co-ordinate the implementation of government-wide policies and initiatives.
- Provided consultation services related to position classification, employee placement strategies, and chaired various boards related to the ICT restructuring initiative.
- Twenty-seven regular and six term positions were filled through formal competition processes for STEM. Eight positions were filled through various direct appointments.
- Prepared detailed classification analysis under delegated and non-delegated authority for 9 reclassification requests.
- Consulted with management/supervisory personnel, employees and the M.G.E.U. in the resolution of various labour and employee relations issues. One formal grievance was filed.
- Maintained payroll records for 530 employees.
- Provided benefit information on 16 employee appointments and 12 retirements to STEM employees.
- Processed 2 WCB accident/injury claims that resulted in no time loss.
- Science, Technology Energy and Mines participated in the various Internship programs offered through the Civil Service Commission as well as the staff training seminars offered through the Civil Service Commission and the consolidated HR Unit.

Computer Services provides the department with information technology support services including: computer systems design and implementation; equipment evaluation and acquisition (outside the Desktop Refresh); user education and assistance (outside the standard suite); and implementation of government wide initiatives, and adherence to guidelines and standards.

Computer Services activities undertaken for CTT/STEM during the year included:

- Establishing the CTT/STEM IT Services section as the IT coordinating unit for the two departments.
- Establishing the Business Systems Steering Committee for both departments.
- Coordinating the March 2008 Desktop Refresh for CTT and Mineral Resources Division in STEM.
- Working with ICT Services Manitoba on the server consolidation project, the ICT Service Desk Initiative, ICT transitioning exercise and to develop the HouseBook Application for STEM.
- Working with Marketing Support Branch in CTT and ICT Services Manitoba to develop the Manitoba Investment Website integrating Google Search capabilities.
- Working on the Evaluation and Implementation team related to the Single Window for Business.
- Developing and submitting a business requirements document to ICTSM for Smart Search Tool and Service Directory
- Issuing an RFP to develop the Career Development Portal.
- Working on the RFP and providing project management for Mines Branch on the Integrated Mining Registry System Phase 1 – Feasibility Assessment & Solution Definition.
- Implementing Minerals Deposit Database Application
- Adding Battery Facilities to the Petroleum mapping project.

18-1(c) Financial and Administrative Services

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Other Expenditures	156.7		150.0	6.7	
Total Expenditures	**156.7**		**150.0**	**6.7**	

ENERGY, CLIMATE CHANGE AND GREEN STRATEGY INITIATIVES

ENERGY DEVELOPMENT INITIATIVES

Energy Development Initiatives (EDI) is a key strategic element of the department. Two branches make up EDI; Energy Policy and Energy Economic Development.

Energy Policy is responsible for developing broad energy policies that support energy economic development. Energy Economic Development is responsible for promoting existing energy resources and helping to develop emerging renewable energy sources for sustainable and environmentally responsible economic growth in Manitoba.

EDI focuses its efforts on promoting and developing clean renewable energy in the province.

OBJECTIVES

The primary objectives of the Energy Development Initiatives include: developing and implementing government-wide economic development strategies encompassing Manitoba hydroelectric resources and other emerging renewable energy development opportunities; developing, analyzing and implementing provincial government's energy policies.

ACTIVITIES/RESULTS

The following provides a summary of activities:

Hydro-Electric Power Sale: EDI continued to co-facilitate discussions with Ontario Energy, Hydro One and Manitoba Hydro regarding a long-term Manitoba hydroelectric power sale to Ontario. The Ontario discussions are ongoing. Manitoba Hydro also signed term sheets for potential power sales to Minnesota Power and Wisconsin Public Service.

Wind Power: Manitoba Hydro issued a Request for Proposals (RFP) for 300 megawatts (MW) of wind generated energy. Seventeen proponents submitted over 80 separate project proposals. Manitoba expects to complete the RFP process in the 08/09 fiscal year. 300 MW of wind development represents an investment of over $600 million. EDI worked with Manitoba Hydro and the wind industry to find ways of maximizing the potential economic development benefits associated with wind development in Manitoba. EDI provided support to Manitoba communities, First Nations and wind energy companies interested in developing or attracting wind energy projects. EDI also worked closely with the Department of Conservation in the development of a policy to allow wind monitoring and development on Crown Land.

Geothermal (Ground Source Heat Pumps): Manitoba is becoming a North American leader in geothermal through an innovative geothermal industry resulting in approximately $30 million of annual direct sales and rising. Work continues to advance the development of industry infrastructure including a financial commitment of $327,500 over a 3-year period to the Manitoba Geothermal Energy Alliance (MGEA). This support is to assist with the full launch of the Manitoba geothermal industry association including the delivery of its quality assurance program. Additionally, in partnership with the MGEA, a Human Resource needs study is in progress with an independent consultant.

Biodiesel: Manitoba offers amongst the most generous biofuels incentives in the country. Work continues to advance market development and the distribution of biodiesel blends to support production on a state of the art fuel testing centre being established in Selkirk. Biofuels Act Regulations are being developed as well. A certified biodiesel testing lab has been established in the province to ensure fuel quality and three commercial biodiesel plants are under construction (Arborg, Beausejour and Winnipeg) as a result of the Manitoba Biodiesel Production Program.

Ethanol: Worked closely with Husky Energy as they completed construction of a new $200 million, 130 million litre, ethanol plant in Minnedosa. Worked closely with the Town of Minnedosa in the development of a new water plant, that in part provides Husky with its water supply. EDI continued to work with other proponents interested in developing additional ethanol production facilities.

Hydrogen: EDI continues to coordinate and chair the activities of the Manitoba Hydrogen Steering Committee, and at the same time to liaise with representatives of the Federal Government, particularly given continuing uncertainty in the directions of Federal energy-research funding programs. A major update paper on Manitoba's hydrogen activities was presented by EDI staff to the hydrogen and fuel cells conference held in Vancouver during 2007. A preliminary proposal was developed for a multiple alternative-fuel bus demonstration project, including refuelling and associated infrastructure, as a significant follow-up to the two earlier temporary bus demonstration projects, but remains uncertain due to continuing uncertainties in Federal funding.

Electrical Reliability Legislation: Working cooperatively with stakeholders, EDI drafted the Manitoba Hydro Amendment and Public Utilities Board Amendment Act. This legislation was introduced in the fall of 2006 prior to the call of the Provincial election. In 2007, EDI staff worked with Manitoba Hydro, The North American Electric Reliability Corporation (NERC), and the Midwest Reliability Organization (MRO) to develop an interim agreement on compliance monitoring and enforcement of electrical reliability standards in Manitoba.

The Winter Cost Control Heating Act: Programs helped Manitoba's low income households become more energy efficient and expanded existing Power Smart programming to sectors where there is below average participation. Manitoba Hydro launched the Lower Income Program in December 2007. Community based pilot projects are ongoing in Brandon and Winnipeg.

Demand Side Management:

- Worked with the Office of the Fire Commissioner on implementing building code updates.
- Received report from Energy Code Advisory Committee.
- Conducted consultations on the new Green Buildings Policy for government funded buildings.
- Supported the development of a lower income community based project in Brandon.

Plug-in Hybrid Electric Vehicles (PHEVs): The Branch has continued to work on other advanced emerging renewable technologies, particularly plug-in hybrid electric vehicles (PHEVs). Planning was undertaken and funding secured through the Budgeting For Outcomes (BFO) process for a significant demonstration project for the conversion of ten conventional hybrid Toyota Priuses to PHEVs. These vehicles are being provided for conversion by a variety of public sector agencies, all within the vicinity of Winnipeg. It is intended for these vehicles to be operated for at least three years with associated monitoring.

Biomass for Heat: EDI has begun working jointly with Manitoba Agriculture, Food and Rural Initiatives (MAFRI) Agri-Energy on the development of opportunities for using agricultural residual biomass (i.e. straw, etc.) as a potential heat source. A priority target is the replacement of coal still being used at a small number of industrial sites and various hog farm and other small agricultural operations.

Western Grid: EDI is participating on the Western Grid Working Group which is studying the potential for a Western Grid that would connect the electric power systems of the provinces of Alberta, Saskatchewan and Manitoba. The Western Grid could form part of an East-West Grid linking other power markets across Canada. The Western Grid has the potential to help meet provincial and federal climate change targets, provide competitively clean energy and increase the security and reliability of energy supply. The Study is at the feasibility stage.

Midwestern Energy Security and Climate Stewardship: The Province of Manitoba along with several states across the Midwestern US signed an agreement to pursue new initiatives aimed at reducing carbon emissions and promoting clean energy production and use. EDI is coordinating Manitoba's involvement in this agreement that includes working groups on renewable energy, energy efficiency and a cap and trade mechanism for greenhouse gas emission reductions.

18-2(a) Energy Development Initiatives

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
a) Salaries & Employee Benefits	1,150.9	14.00	1,151.7	(0.8)	
b) Other Expenditures	2,550.0		2,588.6	(38.6)	
Total Expenditures	**3,700.9**	**14.00**	**3,740.3**	**(39.4)**	

CLIMATE CHANGE AND GREEN STRATEGY INITIATIVES

The Climate and Green Initiatives Branch (C&GI) enhances the provincial government's climate change policy and programming efforts and coordinates climate and green initiatives across government through the Deputy Ministers' Green Initiatives Coordination Committee.

OBJECTIVES

- To develop and coordinate government-wide climate change initiatives. This includes the development of Greenhouse Gas (GHG) reduction strategies in the transportation, agriculture and municipal sectors that promote both economic development and environmental protection.
- To coordinate priority green initiatives together with lead departments as outlined in the government's *Green and Growing Strategy*.
- To advance climate change impact, mitigation and adaptation research.
- To promote cooperative partnerships with the federal government on climate change programs and green policy initiatives in Manitoba.
- To work together with Green Manitoba, the Energy Development Initiative and other departments and agencies of government to advance the implementation of GHG reduction and green economic development strategies across government and in the public and private sectors.
- To promote best practices in climate change action and green policy at the sub-national level.
- To continue in the promotion of climate change public awareness, education and action.

ACTIVITIES/RESULTS

Manitoba Climate Change Action Plan Update: The Branch engaged in internal consultations with government departments and in external stakeholder workshops and consultation sessions, including workshops at the October 23, 2008, "Manitoba's Green Future: Climate Change Action and Greening our Economy" Conference as part of the process to update Manitoba's climate change plan. A follow-up report to *Kyoto and Beyond – A plan of action to meet and exceed Manitoba's Kyoto targets*, the plan will outline over sixty initiatives that will be undertaken to ensure that Manitoba reduces GHG emissions to 6% below 1990 levels by 2012 as required by anticipated climate and emissions reduction legislation.

The plan will build on success in energy efficiency and renewable energy development, confirm new actions to reduce emissions in Manitoba's transportation and agriculture sectors and include new opportunities to work with businesses and communities to reduce emissions. It will also include actions to help Manitobans adapt to climate change.

The Climate and Emissions Reductions Act: Climate and Green Initiatives coordinated the development of a draft climate change and emissions reduction Bill for the Province of Manitoba. The proposed legislation is intended to legislate the Kyoto target of 6% below 1990 levels by 2012. The government plans to introduce the legislation early in the 2008-2009 fiscal year.

Manitoba Hybrid Electric Vehicle Rebate Program: The program offers a $2000.00 rebate on the purchase or lease of a new hybrid electric vehicle in Manitoba. This initiative, announced on November 15, 2006, continued to prove popular with the public. To the end of the 2007-2008 fiscal year, over 600 rebates were issued under this initiative and the number of hybrid electric vehicles registered in Manitoba have more than doubled since November 2006.

Manitoba Climate Action Round Table Discussion Meetings: The Branch organized a series of round table discussions in the Fall of 2007 as part of the process of updating the 2002 *Climate Change Action Plan Kyoto and Beyond – A plan of action to meet and exceed Manitoba's Kyoto targets.* These meetings, co-chaired by Dr. Lloyd Axworthy and representatives from major sectors, informed the development of an updated climate change action plan for Manitoba. The round tables covered issues affecting transportation, agriculture, business, municipalities, Northern and Aboriginal communities along with special sessions for the Manitoba Round Table for Sustainable Development and environmental non-governmental organizations and academics. In addition, the round table discussions led into a broader "Manitoba's Green Future: Climate Change Action and Greening our Economy" conference hosted by Premier Gary Doer at the Fort Garry Hotel on October 23, 2007.

The Green Registry (formerly Manitoba Climate Change Registry): In April, 2007, the Government of Manitoba, the Canadian Climate Exchange (CCE) and the Canadian Standards Association (CSA) signed a Letter of Agreement to collaborate to provide market-based solutions in support of reduced GHG emissions in Manitoba and eventually beyond its borders. A business plan was developed for The Green Registry to assist Manitoba achieve its climate change mitigation objectives. This was achieved by facilitating the development and showcasing of emission reducing projects, tracking and reporting emission reductions stemming from broad-based government programs, helping organizations, associations, families and individuals measure and improve their GHG footprint, and managing a meeting place where demand for high quality GHG credits can connect with demand. Orientation sessions were held to introduce Manitobans to the developing framework early in 2008.

The Climate Registry: Manitoba is a founding member of The Climate Registry, which was established in May 2007 by states, tribes and provinces in North America as a mechanism to measure, track, verify and publicly report GHG emissions consistently across industry sectors and borders. The Registry is a non-profit organization governed by a board of directors of U.S. and Mexican state, tribal and Canadian provincial representatives which encourages voluntary early actions to increase energy efficiency and decrease GHG emissions.

Western Climate Initiative (WCI): Manitoba became one of the first provinces in Canada to become a member of the Western Climate Initiative (WCI) in Spring 2007. The WCI facilitates collaboration amongst western states and provinces to reduce GHGs, establish a regional GHG goal and to design a market-based mechanism to achieve the targeted reductions.

Midwestern Greenhouse Gas Accord: In October 2007, Manitoba formally signed on as a founding member of the Midwestern Greenhouse Gas Accord that aims to establish GHG reduction targets and to develop a market-based and multi-sector cap-and-trade mechanism with a strong emphasis on renewable energy.

Globe 2008 Trade Fair and Conference on Business and the Environment: Manitoba's environmental industry capabilities were represented at this major national and international event which typically attracts approximately 10,000 delegates from around the world in March. Minister Rondeau spoke at the conference.

Green Initiatives Coordination Committee: As the secretariat to the Deputy Ministers' Green Initiatives Coordination Committee, the Branch staffed this executive level interdepartmental body which is tasked with knowledge transfer for action on priority green initiatives that promote both economic development and environmental protection. The Committee identifies priorities for action from within the *Green and Growing* strategy and brings new green initiatives from across governmer t departments to the table.

Community Programming: The Manitoba Climate Change Action Fund (MCCAF) was reconfigured in 2007 to address emissions in high-emitting sectors in addition to supporting public education and outreach programming, and providing grant assistance for individual projects. The redesigned program provides cost-effective opportunities for the Province to reduce GHG emissions in targeted-sectors consistent with the goals outlined in *Green and Growing*, Manitoba's strategic environmental framework. Projects receiving MCCAF funding in the 2007-2008 fiscal year included:

PROJECT TITLE	PROPONENT	AMOUNT
Climate Change Connection Phase VI	Manitoba Eco-Network	$100,000.00
Urban Transportation Initiatives	Resource Conservation Manitoba	$100,000.00
Northern Manitoba Food Self-Sufficiency Projects	Manitoba Aboriginal and Northern Affairs	$75,000.00
2007 Manitoba Envirothon	Manitoba Forestry Association	$4,000.00
2008 Manitoba Climate Change Conference & Earth Forum	Manitoba Ozone Protection Industry Association	$5,000.00
University of Winnipeg Active Transportation Hub	University of Winnipeg	$15,000.00
Organics Transition Program	Manitoba Agriculture, Food & Rural Intiatives	$50,000.00
Buy Local Steering Committee	Manitoba Agriculture, Food and Rural Initiatives	$25,000.00
Building a Carbon Lite Community	Fort Whyte Alive	24,500.00
	TOTAL	$398,500.00

Government Participation in Earth Hour: The Branch coordinated provincial participation in Earth Hour on March 29, 2008, to demonstrate action on climate change. Interior lights were turned off in the Legislative Building and other selected government facilities. Provincial employees were also encouraged to sign up personally and participate in the initiative at home.

Coordination of Government Participation in Commuter Challenge: C&GI coordinated provincial employee participation in the 2007 national Commuter Challenge. The Province of Manitoba achieved a silver standing in the "3000+ Employee Workplace" category for staff participation and Manitoba government employees achieved national recognition from the Go for Green office as a top performing workplace in Canada for a second year in a row. By taking part in this national initiative, over 1151 provincial civil servants prevented an estimated 28 metric tonnes of GHG emissions in Manitoba during the course of Challenge week. Participation by 42,672 individuals in 2886 workplaces and schools enabled Winnipeg to win back its first place standing among major Canadian cities.

Government Flight and Travel Reduction and Offsets Policy: The Branch worked with other government departments to investigate the potential to reduce GHG emissions locally by reducing the amount of travel carried out annually in favour of teleconferencing, webinars and videoconferencing options. A draft policy to purchase offset credits for air travel is being developed.

Landfill Gas Capture: C&GI was involved in working with the City of Winnipeg to move forward on the capture of landfill gas at the Brady Road and Summit Road landfills. Anticipated actions will include obtaining the necessary environmental approvals, reviewing project delivery models and finalizing a business case for methane capture and use at the Brady Road Landfill.

Vehicle Standards Advisory Board: Proposed climate legislation will require that the Minister appoint a Vehicle Standards Advisory Board to review the methodology used to develop California's vehicle emission standards and make recommendations regarding a made-in-Manitoba vehicle standard. The Branch worked with Manitoba Infrastructure and Transportation to coordinate this initiative.

Government House in Order: The Branch coordinated a number of initiatives to reduce GHG emissions from government operations. These included research for a policy to reduce fuel consumption from government fleet vehicles and also work in support of government building operating efficiency through pilot testing of green building rating systems to measure the performance of existing government buildings. It is anticipated that following completion of this building efficiency pilot project, strategies will

be developed to ensure that these facilities operate at maximum efficiency. The Branch also consulted with Service Transformation Manitoba to develop an all-staff survey on green commuting options, and worked to develop a new policy to minimize the GHG impact of government flights.

Review of Provincial Land Use Policies: The Branch was a contributing member of the Interdepartmental Review Committee for Manitoba's provincial land use policies (PLUP) and provided guidance on strengthening the PLUPs from a climate change mitigation and adaptation perspective.

ecoTrust Activities: The Branch provided monitoring and coordination support for administration of the first year of five-year funding totalling $53.0 million allocated to Manitoba through the federal ecoTrust program. This funding will be allocated to programs and initiatives in each sector of Manitoba's emission profile up to 2012. The first year's activities undertaken included actions related to energy efficiency, expanding renewable energy, sustainable transportation, sustainable agriculture and public education programming. The initiatives being funded under this support is anticipated to result in reductions that will contribute to the Province of Manitoba's GHG reduction targets for 2012 and beyond. This funding is expected to result in 1 million tonnes (1 Megatonne) of GHG emissions reductions within Manitoba and contribute to approximately 1/ 3 of Manitoba's Kyoto commitment.

18-2(b) Climate Change and Green Strategy Initiatives

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	446.2	6.00	447.3	(1.1)	
Total Other Expenditures	482.8		3,354.7	(2,871.9)	*1*
Total Grant Assistance	14.3		14.3	-	
Total Hybrid Vehicle Rebate Program	988.3		989.4	(1.1)	
Total Expenditures	**1,931.6**	**6.00**	**4,805.7**	**(2,874.1)**	

1. Timing of agreement

GREEN MANITOBA ECO SOLUTIONS

Green Manitoba Eco Solutions is a special operating agency of the Department of Science, Technology, Energy and Mines. The Department supports Green Manitoba Eco Solutions' objective to implement a proactive and integrated community-based model of program and service delivery focused on advancing Manitoba's strategic priorities in environmental protection and sustainable resource management. Green Manitoba tables its annual report under separate cover with the Manitoba Legislature.

18-2(c) Green Manitoba Eco Solutions

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Expenditures	1,992.6		1,992.6	-	

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT

OBJECTIVES

The main focus of Science, Innovation and Business Development (SIBD) is to provide Manitoba with a comprehensive, integrated and coordinated approach to innovation, research and technology initiatives including:

- research, innovation and technology policy development and coordination;
- knowledge based industry development and growth;
- building Manitoba's life sciences presence
- smart community development; and
- extending broadband access to all of Manitoba.

SIBD's mission is *to promote and enhance a climate of research, innovation and technology development that spurs responsible economic development for the benefit of all Manitobans.* Its objectives are to:

- develop public policy initiatives in support of research, innovation and technology development;
- develop a provincial innovation infrastructure;
- build and strengthen the research and innovation capacity within the province;
- build community capacity for sustained economic development in the new economy;
- build the capacity for new company formation, attraction and growth; and
- coordinate the implementation of public policy initiatives in the areas of research, information technologies, and investments.

PROGRAM AREAS

Strategic Planning and Analysis
Strategic Planning and Analysis provides a central role for the Department in areas of strategic and operational planning and organizational development. Strategic Planning and Analysis also provides policy and research support to the Department and is the lead across government on the development and implementation of policy, strategies and initiatives on innovation, science and research issues.

Knowledge Enterprises
Knowledge Enterprises works in partnership with key stakeholders to develop an innovation environment in which the Information Communications and Technology (ICT), digital media, customer contact centre and nanotechnology sectors can thrive.

Life Sciences
Life Sciences works with multiple public and private stakeholders to strengthen Manitoba's globally competitive life sciences cluster in the health, agri-food, nutraceuticals and environment sectors, leading to positive social and economic outcomes for all Manitobans.

Broadband Initiative
Broadband Initiative works with the private sector and community based organizations in order to provide high-speed connectivity and Broadband capacity to those areas in the province where such services do not currently exist.

ACTIVITIES/RESULTS

Strategic Planning & Analysis

Manitoba Research and Innovation Fund (MRIF)

With a 2007/08 core allocation of $12.95 million, the Manitoba Research and Innovation Fund (MRIF) is the main vehicle for provincial research and innovation funding. Established in 2003/04 the MRIF has three main components: the Research Fund element; the Health Research Initiative; and the Innovation Fund element. In 2007/08, it also supported the Broadband Connectivity initiative with additional funding of $200,000, Community Connections with $200,000 and Digital Media with $500,000, for a total programming budget of $13.85 million.

The objectives of the MRIF are:

- to increase the capacity of Manitoba's universities, colleges, hospitals and other not-for profit institutions to carry out important world-class scientific research and technology development through the funding of research projects identified as a priority by the Province;
- to increase Manitoba's capacity for innovation through the support of science and technology awareness, technology commercialization and other strategic initiatives;
- to enhance job creation, economic growth, productivity and competitiveness;
- to encourage collaboration between and within the private sector and research institutions;
- to enhance Manitoba research institutions' abilities to attract and keep world-class researchers and skilled technicians, and to conduct state-of-the-art research; and
- to develop improvements for Manitobans' health, environment, and quality of life.

Research Fund

The Research Fund provided over $9 million of support in 2007/08 to expand Manitoba's research capacity. In 2007/08, projects approved for funding included: the Manitoba Centre for Health Policy; CancerCare Manitoba's NorCOMM (North American Conditional Mouse Mutagenesis Project/Knock-out Mouse Project) which is a major project supported by Genome Canada with research collaboration from around the world; Manitoba Centre for Proteomics and Systems Biology; Pulse Canada and Genome Canada projects; various Regional Partnerships Program projects under the Canadian Institutes of Health Research; expanded support for the Manitoba Health Research Council; various Canada Foundation for Innovation (CFI) projects at the Universities of Manitoba, Brandon, and Winnipeg; the MITACS Internship Program; the HIV/AIDS Coordination Centre; and the International Partnering Fund.

Health Research Initiative

HRI funding, totalling $2.0 million was provided to five Manitoba health research centres in 2007/08 to assist in supporting research overhead costs. The program funds were apportioned to each centre according to a formula that has been used consistently since the program's inception in 1996/97. Payments to each HRI participant in 2007/08 were as follows:

CancerCare Manitoba	$ 164,000
Manitoba Institute of Child Health	$ 146,000
Health Sciences Centre	$ 384,000
St. Boniface General Hospital Research Centre	$ 356,000
University of Manitoba	$ 950,000
Total	$ 2,000,000

In 2007/08, $1.0 million in additional support was reallocated from the Manitoba Government's enabling vote to the HRI to help meet the resource challenges Manitoba's health research institutes face.

Innovation Fund

This program element is used to assist the implementation of identified strategic Manitoba Government innovation priorities. Funding in this stream is catalytic, supports the broader industry in developing their innovation structures, and promotes economic development by leveraging and expanding research capacity and assisting with technology commercialization.

In 2007/08, a total of $1.9 million of Innovation Fund support was provided to various projects including the following:

Project Name	Funding
Nanotechnology Systems Fabrication Lab	$27,000
Fortune Cat Video Games Incubator	$220,000
Function Four - Intern. Inst. Of Research for the Knowledge Worker	$22,000
TRLabs	$480,000
MindSet	$250,000
Westlink	$35,000
MITACS (two projects)	$82,500
The Information Forge	$19,796
Advanced Manufacturing Initiative	$55,313
Misipawistik Telecommunication Cooperative	$40,000
GoCAD	$4,230
CME Hall of Fame	$10,000
cafesonique.com	$25,000
ICTAM WSI Project/New Market Readiness	$25,000
Brandon University's CANARIE connection	$32,800
Virtual Reality Fund	$100,000

Manitoba Centres of Excellence Fund (MCEF)

The Manitoba Centres of Excellence Fund (MCEF) is the Manitoba Government's research and development support mechanism for those Manitoba based researchers who have been successful under the Federal Government's Networks of Centres of Excellence (NCE) initiative. The national headquarters for the Intelligent Sensing for Innovative Structures (ISIS) network that conducts research and development on advanced composite materials and electronic sensors for construction engineering projects such as bridges and earthquake resistant buildings is located at the University of Manitoba, and has received major MCEF support over the past decade. Since MCEF was formed in 1989/90 it has provided over $7 million of matching support for all projects.

During 2007/08, MCEF support totalling $720,070 was provided to the following Manitoba projects and leveraged federal NCE research funding at the 5:1 ratio:

- Intelligent Sensing for Innovative Structures
- Sustainable Forest Management Network
- Canadian Arthritis Network
- Canadian Water Network
- The Automobile of the 21st Century
- ArcticNet
- Advanced Foods and Materials Network
- Mathematics of Information Technology and Complex Systems
- Allergy, Genes and Environment Network
- Canadian Design Research Network
- Canadian Obesity Network
- National Initiative for the Care of the Elderly

Science and Technology International Collaboration Fund (STIC)
In 2007/08 a new program called the STIC Fund was launched to support international collaborative research projects with the potential to generate commercial activity and economic benefit for the province of Manitoba. A million dollars per year for five years has been set aside from the research component of MRIF to support a variety of international research collaborations.

Projects funded under the STIC fund in 2007-2008 include:

- Dr. Sean McKay, MB Composites Innovation Center and the Collaborative Research Center - Advanced Composite Structures (Composite structures). ($100,000)
- Dr. John Wilkins, University of Manitoba and the University of Adelaide. (Proteomics) ($100,000)
- Richardson Center for Functional Foods and Nutraceuticals and the University of Adelaide (Functional Foods) ($100,000)
- Dr. Robert Hill, University of Manitoba and the South Australian Research and Development Institute (SARDI). (Brassica Development) ($100,000)
- Dr. Geoff Hicks, University of Manitoba and Institute for Medical Research, Monash University.(Genomics) ($150,000

Manitoba Network for Science and Technology (MindSet)
The Manitoba Network for Science and Technology (MindSet) is an STEM sponsored initiative led by a full-time Program Facilitator that supports the development, co-ordination and implementation of year-round science and technology awareness activities in Manitoba. MindSet encourages and promotes:

- scientific and technological awareness, knowledge, ability and skills;
- improved school-to-work transition in science and technology areas; and
- innovation in science and technology.

In particular, MindSet's role is primarily one of facilitating, networking, communicating and implementing activities, especially in areas important to the provincial economy. These areas include information technology, biotechnology, aerospace, advanced manufacturing, composites and new materials and digital media. MindSet's key activities in 2007/08 included:

- Bio-Aware Educators Conference
- Digitized Student Technology Conferences
- Girls in Gaming Program
- Manitoba Science and Technology Achievement Luncheon
- Microsoft Partnership Programs
  - Partners in Learning (PiL) Program
  - Peer Coaching
  - 21st Century Leadership Program
  - Innovative Teachers Awards
- MindSet Summer Institutes
- National Biotechnology Week
- New Media Workshops
- Sanofi-Aventis BioTalent Challenge
- Science Fairs
- Teacher Professional Development Workshops
- Win-Cube Student Satellite Program

Many of the students involved in Mindset programs have been recognized for their outstanding achievement. For example, in 2007,Ted Paranjothy from Winnipeg became the first Canadian student to win the international BioGENEious award after winning the national Sanofi-Aventis BioTalent Challenge competition. He was also the second Winnipeg student in two successive years in a MindSet program to be chosen as one of Canada's "Top 20 Under Twenty".

Manitoba Health Research Council (MHRC)
In 2007/08, the Department provided $5.1 million in funding to the Manitoba Health Research Council to support the administration of the Council and its personnel awards and research grants. This funding also helped implement the *Envisioning the Future* strategic plan developed by the Council.

MHRC's new strategic direction is based upon four action areas which will increase the strength and capacity of the health research community in Manitoba:

- Establish MHRC as the coordinating body for health research in Manitoba;
- Develop, recruit and retain the best research faculty;
- Facilitate research networks, linkages and communication; and
- Move research evidence into practice.

In 2007/08 the Manitoba Gvernment also committed to the strategy by appointing a new Council tasked with its implementation:

J. Dean Sandham, Dean, Faculty of Medicine, University of Manitoba (Chair)
Judith Bartlett, Associate Professor, Centre for Aboriginal Health, University of Manitoba
Lynn Bishop, Chair, Health Sciences Centre Foundation and General Manager, Cargo Jet
Henry Friesen, Distinguished Professor Emeritus, University of Manitoba
Albert D. Friesen, President and CEO, Medicure
David Graves, Chairman and CEO, Imris
Ray Hoemsen, Director, Applied Research and Commercialization, Red River College
Joanne Keselman, Vice-President, Research, University of Manitoba
Arnold Naimark, Director, Centre for the Advancement of Medicine
Brent Schacter, Chief Executive Officer, Canadian Association of Provincial Cancer Agencies
Ian Smith, Director General, National Research Council Institute for Biodiagnostics

Ex officio appointments
John Clarkson, Deputy Minister, Manitoba Science, Technology, Energy and Mines
Brian Postl, CEO, Winnipeg Regional Health Authority
Arlene Wilgosh, Deputy Minister, Manitoba Health

Additional information is available from the MHRC Annual Report.

Knowledge Enterprises

The Knowledge Enterprises Branch activities for 2007/08 were focused mainly in the following four areas:

1. Creating an Environment Fostering ICT and Digital Media Business Development
2. Increasing ICT and Digital Media Research and Technology Commercialization
3. Marketing and Attracting Investment in Manitoba's ICT and Digital Media Sectors
4. Enhancing The Capacity Of Manitoba Communities To Participate In The Knowledge Economy

1. Creating An Environment Fostering ICT and Digital Media Business Development

Industry and Professional Associations
The branch worked closely with relevant industry and professional associations to promote competitiveness within Manitoba's knowledge based businesses; nurture the growth of an advanced technological infrastructure; and ensure the recruitment and retention of a skilled labour force. Such organizations include the Information and Communications Technologies Association (ICTAM), the Canadian Information Processing Society, New Media Manitoba, The International Game Developers Association (Manitoba Chapter) and the Manitoba Customer Contact Association.

Fiscal 2007/08 represented the Province's final year of a 5-year $130,000 commitment to ICTAM for operational funding.

Business Incubation

The Knowledge Enterprises Branch continued to be actively involved with two new incubation projects; The Eureka Project; Smartpark's Incubator and the Fortune Cat Games Studio.

- **The Eureka Project** is a technology incubator focused on the priority sectors of information technology and wireless communication, advanced manufacturing and materials, functional foods and nutraceuticals and ag-biotech. Located at the University of Manitoba Smartpark, the incubator's objective is to provide the space, management expertise and resources for the successful development of high technology start-up companies in Manitoba; from the university and the community at large. The Branch facilitated the second installment of a $283,000 commitment under the Winnipeg Partnership Agreement to support the new incubation program and continues to work with the program in an advisory capacity.

- **Fortune Cat Games Studio** is a not-for-profit organization that is building on Manitoba's expertise and competitive advantages in the global video games industry. The incubator studio houses small video game companies of three to five people where each team is to produce a video game prototype that will be marketed to video game publishers. Fortune Cat Games Studio incubator is a collaboration of various strategic partners including the Winnipeg Partnership Agreement, Telefilm Canada, International Games Developers Association (IGDA) - Winnipeg Chapter, Red River College, Province of Manitoba, Industry Canada and Destination Winnipeg.

New Market Readiness

STEM provided $25,000 this year to support a new and innovative pilot project led by the ICT Association of Manitoba. The New Market Readiness Program is a $1.8M project that will create and disseminate, in an accessible way, a domain of knowledge to assist Manitoba companies in raising their level of 'readiness' to enter into trade, technology partnering, and export activities in the United States. This unique approach is designed to integrate more fully with the company's planning processes through pre-programming diagnostic services and optimize returns in terms of the success factors associated with global competitiveness through training and hands-on mentoring.

Manitoba Interactive Digital Media Fund (MIDMF)

In 2007/08 $300,000 was allocated to MIDMF. The objectives of MIDMF are: to provide recoupable financial support to Manitoba companies for the development, production, and marketing of high quality, original, Interactive Digital Media products that are intended for the general public; to raise the profile and presence of Manitoba's Interactive Digital Media creators in both domestic and international markets while providing opportunities for professional development; and, to assist in the growth and development of a Manitoba Interactive Digital Media production and distribution industry that is competitive in international markets.

- **Product Assistance:**
  During the 2007/2008 fiscal year, 8 applications were approved for a total contribution of $138,612.
- **Access to Markets:**
  During the 2007/2008 fiscal year, 18 applications were approved for a total contribution of $38,452.
- **Industry Support**
  During the 2007/2008 fiscal year, 6 proposals were approved for a total contribution of $52,500.

New Media Manitoba - New Media Business Development Program

New Media Manitoba is a non-profit association of professionals that advocate and provide focused training, support and guidance to the new media business and development community. Comprised of over 650-members, NMM is a common ground for people seeking to make connections and collaborate on interactive digital projects. New Media Manitoba collaborated with Myers Norris Penny to design and implement an intensive 6 week business and marketing training program to small digital media companies in Manitoba. STEM, through the Manitoba Interactive Digital Media Fund, committed to $15,500 towards the pilot of the New Media Business Development Program.

ICT and Digital Media Trade and Export
Manitoba has also been engaged in discussions with the State of Jalisco, Mexico on ICT and digital media trade and export opportunities. A business video conference series between Manitoba and Jalisco companies' interested in bilateral trade and business development has been underway since 2005. In February of 2007, a video conference roundtable on ICT R&D Cooperation was held. The objective of this roundtable was to explore R&D, business and general partnership opportunities between the two jurisdictions. There were 21 participants including representatives from the private sector, state/provincial/federal officials, local Chambers and Universities. Several collaborative opportunities were identified and activities continue on this front.

2. Increasing ICT and Digital Media Research and Technology Commercialization

TRLabs

Fiscal year 2007/08 represented the second year of a renewed 5-year, $2.4 million funding agreement with TR Labs. The Manitoba lab met or exceeded the majority of their performance metrics for the fiscal year. The Knowledge Enterprises Branch continues to work actively with TR Labs to explore ways to grow the number of applied research and commercialization projects undertaken with local Manitoba companies. In the past year, the Manitoba lab added 8 new partners and initiated more than a dozen new projects in three main areas of research: e-health; e-home; and connected media. STEM co-hosted the annual TR Labs Community Dinner and also provided support for the TR Labs ICT symposium on "Connected Media". The Manitoba lab also partnered with the Virtual Reality Centre and the federal and provincial governments to acquire the latest in remote visualization technology.

Financial Assistance Programs
In concert with Manitoba Competitiveness, Training and Trade, the Knowledge Enterprises Branch continues to work with a number of technology-based companies to provide support for technological assessments and marketing evaluations for business expansion purposes. In 2007/08, nine ICT/Digital Media companies and organizations received support through the Business Development Fund, which includes the Technology Commercialization Program, the Feasibility Studies Program and Special Projects Fund.

3. Marketing Manitoba's ICT and Digital Media Sector and Attracting ICT and Interactive Digital Media Investment

Manitoba ICT Research Guide
In 2007/08 the Knowledge Enterprises Branch produced a publication entitled "*ICT Insights; a Guide to Information and Communications Technology Research and Resources in Manitoba*". The guide showcases the research and innovation capabilities of the Information and Communications Technology (ICT) network of researchers, professors, scientists and students in Manitoba's research institutions. This publication was designed for distribution to local, national and international targets. The guide will be developed into an online format and will be posted on the branch website.

Manitoba Digital Media Guide
The Knowledge Enterprises Branch collaborated with MIDMA and other government offices to create a sector directory which highlights Manitoba Digital Media firms and their capabilities with the intention of marketing local capabilities both here and abroad.

Manitoba Digital Media Market Development/Investment Attraction
Similar to the film/television industry, the scale and scope of Manitoba's local digital media industry is limited by available resources, such that outside work is an important factor in increasing the volume of activity and supporting infrastructure in the province. In 2007/08, STEM collaborated with a consortium of Manitoba stakeholders and private sector companies in the "Game on Manitoba" initiative to begin identifying areas of opportunity and build relationships with target companies in an effort to attract business opportunities to Manitoba. To develop these linkages STEM attended conferences such as the Vancouver International Digital Festival (VIDfest), Montreal Game Summit (MIGS) and the Game Developers Conference (GDC) in San Francisco.

4. Enhancing Capacity of Manitoba communities to participate in the Knowledge Economy

E-Index
The Knowledge Enterprises Branch worked closely with government and community stakeholders to enable two pilots in select Manitoba communities to measure community capacity in the ICT sector. One of these pilots was completed in the Misipawistic Cree Nation (Grand Rapids) and the other, in Manitoba's 13 rural francophone municipalities. The E-Index provides information on four elements; a community's level of technological infrastructure, the population's skill level, the utilization of technology as well as the community's capacity to afford the technology. A community's capacity across these four elements can be directly correlated to their ability to achieve and maintain competitiveness as communities evolve from traditional to knowledge economies.

In 2007/08 the Knowledge Enterprises Branch also engaged with jurisdictions outside of Manitoba to further the reach of E-Index and lay the foundation for partnerships in this area across the country.

Life Sciences

The Life Sciences Branch worked with key stakeholders on initiatives in the biomedical, health biotech, and agricultural biotech sectors that lead to increased economic activity in the province.

The efforts of Life Sciences in 2007/08 were primarily focused on four activities:
1. Working With Key Stakeholders on Economic Development Initiatives
2. Supporting Research
3. Increasing Industry Awareness of the Life Sciences Sector Internally and Externally
4. Establishing Formalized Linkages

1. Working With Key Stakeholders on Economic Development Initiatives

Mid-Continent Knowledge Corridor
The Life Sciences Branch is working cooperatively with Destination Winnipeg and partners in the USA and Mexico to establish a Mid-Continent Knowledge Corridor. The purpose of the Mid-Continent Knowledge Corridor is to capitalize on established relationships through the North America SuperCorridor Coalition (NASCO), develop a network of researchers, industry representatives, and government officials that will work collaboratively to strengthen the life sciences cluster along the central corridor of North America. It is anticipated that this knowledge corridor will also attract investment and research partners from the east and west coasts.

Manitoba Agri-Health Research Network
Manitoba Agri-Health Research Network (MAHRN) has been established as a portal to the Province's nationally and internationally recognized centres involved in the commercialization of agricultural products for improved health. Manitoba's agri-health sector is home to three leading edge facilities that work closely with industry to research and develop functional foods and nutraceuticals: Canadian Centre for Agri-food Research in Health and Medicine, Richardson Centre for Functional Foods and Nutraceuticals, and the Food Development Centre.

Life Science Association of Manitoba (LSAM)
The Life Science Association of Manitoba is the new name for the Health Care Products Association of Manitoba. This name change is a result of a re-branding exercise that was undertaken in late 2006/ early 2007. Prior to undertaking the re-branding exercise the associations mandate was reviewed and updated with input from the Life Science Branch. The current LSAM mandate focuses on four pillars. These include: 1) Building human resource capacity, 2) Serve as sector advocate, 3) Build the local life science community, and 4) Promote economic development. The new LSAM brand was unveiled during the LSAM annual general meeting on September 27th, 2007. LSAM has appointed Mr. Brian Kelcey as the new executive director. LSAM is working closely with STEM staff on sector specific outreach activities.

2. Supporting Research

The Life Sciences branch was instrumental in securing funding for the Composites Innovation Centre (CIC) from Agriculture and Agri-Food Canada in continued support for a National Biofibres Initiative for the development and commercialization of bio-materials for advanced composite applications. The project will investigate how naturally occurring fibres in plants, such as hemp and flax, can be turned into reinforcement materials that replace the man made glass and carbon fibres in products like parts for buses, recreational vehicles, sporting goods and aircraft. The work being undertaken within this initiative is highly relevant to the emergence of Manitoba's and Canada's bioeconomy and will lead to the commercialization of a range of new industrial products.

In addition, there has been support for international collaborative research projects through the Science and Technology International Collaboration (STIC) fund (see above), which has been managed through the Life Sciences branch.

3. Increasing Industry Awareness of the Life Sciences Sector Internally and Externally

AusBiotech 2007 Conference
AusBiotech 2007 Conference and Exhibition was held in Brisbane, Queensland, Australia in October 2007. The theme for the 2007 conference was "Smart Targeting into Global Markets". Life Sciences Branch staff and stakeholders from Manitoba's life sciences community attended the conference and participated in partnering meetings to showcase and promote Manitoba's life sciences sector and to identify opportunities to increase collaboration between the two jurisdictions. Approximately 1,300 participants from Australia and the international community were in attendance. Manitoba, once again, had a strong presence at the conference. In conjunction with AusBiotech, meetings were held with government and life science industry representatives in Sydney, New South Wales; Melbourne, Victoria; and Adelaide, South Australia. Opportunities for inward investment, partnerships and research collaborations were identified at these meetings.

NZBio Conference 2008
The NZBio Conference 2008 was held in Auckland New Zealand on March 31 to April 2, 2008. staff from the Life Sciences Branch and stakeholders from Manitoba's life sciences community attended the conference and participated in the conference program and partnering meetings to showcase and promote Manitoba's life sciences sector and to identify opportunities to increase collaboration between the two jurisdictions. Manitoba also hosted a reception at the conference. The event included more than 800 delegates from a wide range of organizations, including core biotechnology companies, research organisations, suppliers, multinationals, industry service providers, educators and investors from New Zealand, Australia and other Asia-Pacific countries. In addition, meetings were held with government and life science industry representatives in Auckland and Rotorua. One-on-one business meetings held at the event and during out-call meetings identified opportunities for inward investment, partnerships and research collaborations.

BIO 2007 International Biotechnology Convention and Exhibition
Each year the Biotechnology Industry Organization (BIO) hosts the world's premier biotechnology conference, bringing together scientists, entrepreneurs and innovators from around the world. Held in Boston, Massachusetts, BIO 2007 drew a record 22,366 attendees, a nearly 15 percent increase from the previous year, with representatives from 48 states and 68 countries. One-third of attendees came from outside the United States. Of these attendees, more than 50% possessed senior level titles, allowing for the opportunity to interact and form partnerships among the world's life science leaders and key decision-makers.

In response to interest from Manitoba biotechnology companies and research centres, 1000 square feet of exhibit space was purchased for a Manitoba pavilion at BIO 2007. Within the pavilion, Manitoba exhibitors included: Cangene Corporation; Red River College; University of Manitoba; Industrial Technology Centre; Life Sciences Association of Manitoba; Genome Prairie; Medicure Inc.; Composites Innovation Centre; and Manitoba Science, Technology, Energy and Mines. In total, 67 Manitobans participated in BIO 2007. The companies indicated their appreciation for the leadership shown by the Province at BIO 2007 and have requested both continued and enhanced provincial participation at BIO 2008 in San Diego. A strong Manitoba team approach and novel concepts were undertaken to support exhibitors for 2008, designed to give the participating companies and research institutions even higher profile and greater impact at the convention.

Business of Science Symposium 2007
The Business of Science Symposium is a two-day conference designed to highlight Manitoba's growing life science industry, and in so doing, educate stakeholders on industry capabilities, celebrate local accomplishments, and promote both business and career opportunities. The Symposium serves to strengthen the province's primary life sciences sectors, agriculture, health and environment, by demonstrating Manitoba's notable proficiencies and facilitating the development of partnerships. The sixth annual Symposium was held in Winnipeg on October 24 and 25, 2007.

In previous years, the Province was responsible for the organization of the Business of Science Symposium and provided the majority of funding to the conference. LSAM is now responsible for running the conference. In the current organizational structure, the steering committee solicits sponsorship; the Province of Manitoba was a platinum sponsor and hosted the conference's gala dinner. The Branch remained active in the event as a member of the Symposium's Steering Committee. The Life Sciences Branch was also responsible for the organization of the post-secondary student component of the conference, aimed at making university and college students from the major post-secondary institutions aware of life science career opportunities at home in Manitoba.

The event was an opportunity for over 500 people to come together, over the course of the two days, to focus on the bright future of Manitoba life sciences industry. Those in attendance included business leaders, researchers, science and technology innovators, life sciences students and educators, capital providers, and government officials who support the life sciences sectors. Ultimately, the Business of Science Symposium was a success in showcasing existing possibilities for collaboration with local companies, and in capturing the momentum of Manitoba's dynamic life science industry.

Biotechnology at the Forks 2007
As a part of National Biotechnology Week 2007, the staff from the Life Sciences branch partnered with the Life Science Association of Manitoba (LSAM) on a ***Community Outreach Event*** at the Forks Market Place. The purpose of this event was to raise awareness and understanding in Manitoba of the extraordinary accomplishments and possibilities that exist in the field of biotechnology. Representatives from the Province's biotechnology sector set up interactive displays and activities that demonstrated how biotechnology is changing the way we live. School groups were bussed in to the site and visitors to the Forks were encouraged to take part in activities as well.

4. Establishing Formalized Linkages

Wellness West

Wellness West, established in 2003, is a western Canadian collaboration dedicated to the development of an economically viable functional foods and natural health products industry in western Canada. The partner organizations include: Agriculture and Agri-Food Canada; Alberta Agriculture, Food and Rural Development; British Columbia Ministry of Agriculture, Food and Fish; Canadian Technology Network; Manitoba Agriculture Food and Rural Initiatives; Manitoba Science, Technology Energy and Mines; National Research Council's Industrial Research Assistance Program; Saskatchewan Agriculture Food and Rural Revitalization; Saskatchewan Industry and Resource; and Western Economic Diversification. A number of initiatives were undertaken in 2007/08 on behalf of the partner organizations including: an examination of Wellness West mission, goals and priorities; revitatlization and distribution of the Technology Watch magazine; revisions to the technology commercialization road map document; continuation of technology commercialization roadmap training; and active participation in the Nutri-Net Canada Project to help expand market opportunities for the Canadian functional foods and natural health products industry.

Pharmaceutical Liaison Committee

In June 2006, the Pharmaceutical Liaison Committee (PLC), co-chaired by the departments of STEM - Life Sciences Branch and Health, was established to provide a central point of contact between government and the pharmaceutical and biotechnology industries. The Committee provides a discussion forum between industry and key government departments including, Science Technology Energy and Mines, Health, and the Community Economic Development Committee of Cabinet. The Committee also facilitates internal discussion, which ensures consistent application of decisions within the life sciences sectors in Manitoba. In September 2007 the PLC committee organized a *Communication Forum* to facilitate and encourage an ongoing dialogue between government departments and pharmaceutical supply chain stakeholders. The *Communication Forum* provided the opportunity to introduce and discuss Manitoba's unique and progressive environment for research and development activities by the pharmaceutical industry.

Broadband Initiative

Since its creation in September 2001, the Broadband Initiative has been active in promoting partnership with the private sector and community based organizations to provide broadband or high-speed Internet access to communities where that service did not exist.

The Province's vision is to utilize high speed Internet connectivity to secure economic and social benefits available through the use of information and communications technologies for the benefit of Manitobans.

The Initiative lends support to the activities undertaken by Industry Canada's Broadband for Rural and Northern Development (BRAND) Program. This $150 million National initiative announced in September 2002 has provided 118 Manitoba communities with a total of $6.6 million in matching funds to enable the creation of broadband networks throughout the province.

In July of 2004 the province's new Broadband Strategy entitled Connecting Manitobans was approved. The strategy's main objective is to ensure that all communities in Manitoba have access to broadband or high speed network services by 2010.

In order to help attain this goal the Municipal Rural Infrastructure Fund (MRIF) has, since June 2005, allocated $7.5 million to community based telecommunications infrastructure construction thereby allowing a further 67 Manitoba communities to benefit from accessing Broadband networks.

Into the 2008/09 and 2009/10 fiscal years, the Initiative will work directly with community champions to help develop viable community-based Internet Service Providers (ISPs) in aboriginal communities. Initial focus will be on four associated communities including Lynn Lake and Leaf Rapids. This work supports Manitoba goal of connecting all communities in Manitoba with broadband or high-speed services by 2010 and is consistent with work underway by the Manitoba Network Task Force.

Community Connections

On March 7, 2000 the Governments of Canada and Manitoba announced a cost-sharing Memorandum of Agreement (MOA) of up to $11.1 million to increase the number of public Internet access sites in Manitoba from 146 to 586. The MOA with Industry Canada was extended providing a further $2.48 million for the 2002/03 and 2003/04 fiscal years. In both 2004/05 and in 2005/06 there was $666,500 and, in 2006/07 there was $498,980 in funding. In 2007/08 there was $498,980 in funding support provided to Community Connections. These funds were used to; support the existing access sites, further develop the Community Resource Networks (CRN's) and the content of their websites, develop enhancements to the CIMNet application used by the CRN's for their websites, provide Help Desk support and, to support the Canada Access Program Youth Initiative (CAPYI).

In Winnipeg, 201 sites were established and in rural Manitoba 338 sites were established. Of note, 61 sites were established in Northern Manitoba and approximately 50 access sites in bilingual Manitoba municipalities. Sites were established in a variety of community organizations. The capacity of all public libraries was significantly increased. Funding support available to the access sites included funds for connectivity, assistive technology and small grants for local communities' broadband initiatives. In 2007/08, 342 sites requested funds. It is estimated that about 58 sites continue to provide services without requesting funding.

Community access sites are organized into Community Resource Networks (CRN's) that jointly develop and host local websites. The Seniors Resource Network, for example, has developed a website (http://seniors.cimnet.ca) that presents the best of senior's related information. This is the default homepage for the access sites in the 30 senior's resource centres throughout Manitoba. Sites in the St. Boniface Resource Network are linked to community information through http://stboniface.cimnet.ca. Approximately 25 CRN's were developed. Many Northern communities are beginning to use public access and CIMNet applications to create virtual communities. The Hudson Bay Neighbours' (http://hbn.cimnet.ca) and the Bayline Regional Roundtable (http://baylinerrt.cimnet.ca) are examples.

Out of the work done through the Community Connections Initiative, the youth development team from Brandon University has developed into a small Manitoba software development company Function Four, Inc. This group with the support of CIMNet, Community Connections, and Industry Canada has developed the CIMNet applications and the E-Index.

Technical and application support was originally provided to access sites by a Help Desk established by the Swan Valley Resource Network with support from Community Connections. This developed into a small Manitoba company (83 North, Inc.). A similar Francophone helpdesk was developed in partnership with Réseau de Ressources Communautaires Franco-Manitobain. The Help Desk was expanded in 2003/04 to provide service to Saskatchewan, Alberta, Nunavut and the North West Territories. Toward the end of 2003/04 the two separate services merged to form a not-for-profit organization known as HelpCan. In 2004/05 help desk services were migrated to the Manitoba E-Association for delivery in Manitoba and some locations in Saskatchewan, Alberta, Nunavut and the North West Territories. This continued through 2005/06 and 2006/07 and 2007/08.

The CAP Youth Employment Initiative (CAPYI) employs approximately 100-160 Youth (age 16 to age 30) annually. Youth employees are funded through a partnership with funding of approximately $1.0 million from various partners including; Community Connections, Industry Canada, MB Education, and Microsoft. Youth support the operation of access sites and the CRN web sites. Toward the end of 2003/04 The Manitoba E-Association, a not-for-profit organization, was established to serve as the delivery agent for the CAPYI program. In 2004/05 this organization expanded to deliver help desk services. Throughout 2005/06, 2006/07 and 2007/08 in addition to delivering Help Desk services and CAPYI, the Manitoba E-Association also coordinated communication for the Canada Access Program in the Prairie Northern Region (PNR), published a newsletter, delivered project management services for the Parkland Region Wireless Broadband Rollout, and the Central Region Wireless Broadband Rollout with funding from the Manitoba Canada Infrastructure Program for a high speed wireless projects, delivered Mobile Technology Workshops, and continued in developing a community learning network in Canupawakpa First Nations community through the federal Office of Learning Technologies. In May of 2006 Manitoba E-Association was also invited to participate in Microsoft's Global Community Affairs Summit where it was presented with an award for outstanding contribution to the Unlimited Potential Program.

18-3(a) Science, Innovation and Business Development

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	1,610.0	20.00	1,628.5	(18.5)	
Total Other Expenditures	744.2		751.8	(7.6)	
Total Manitoba Research and Innovation Fund	15,342.5		15,350.0	(7.5)	
Total Manitoba Centres of Excellence Fund	720.1		720.1	-	
Total Less: Recoverable from Urban Development Initiatives	(743.5)		(750.0)	(6.5)	
Total Expenditures	**17,673.3**	**20.00**	**17,700.4**	**(27.1)**	

MANITOBA HEALTH RESEARCH COUNCIL

The Manitoba Health Research Council (MHRC) provides funding for health research initiatives. The Manitoba Health Research Council tables its annual report under separate cover with the Manitoba Legislature.

18-3(b) Manitoba Health Research Council

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Expenditures	1,952.6		1,952.6	-	

INDUSTRIAL TECHNOLOGY CENTRE

The Industrial Technology Centre (ITC) is a special operating agency of the Department of Science, Technology, Energy and Mines. The Department supports ITC's contribution to economic development activities in Manitoba via an Economic Development Contribution Agreement (a performance contract). ITC provides a wide range of technical services in support of technology based economic development in Manitoba. ITC tables its annual report under separate cover with the Manitoba Legislature.

18-3(c) Industrial Technology Centre

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Expenditures	750.0		750.0	-	

MANITOBA EDUCATION, RESEARCH AND LEARNING INFORMATION NETWORKS

The Manitoba Education, Research and Learning Information Networks (MERLIN), is a special operating agency of the Department of Science, Technology, Energy and Mines. MERLIN tables its annual report under separate cover with the Manitoba Legislature.

18-3(d) Manitoba Education, Research and Learning Information Networks (MERLIN)

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Expenditures	445.8		445.8	-	

MANITOBA INFORMATION AND COMMUNICATION TECHNOLOGIES

ICT SERVICES MANITOBA

OBJECTIVES

Ensure the best possible use of the province's existing information and communication technology (ICT) resources, systems, platforms, applications, and skills, while finding new ways to meet service challenges, plan for future needs, and respond to economic opportunities.

ACTIVITIES/RESULTS

- Develop and continually improve ICT strategic plans, policies, and measurement protocols.
- Work with stakeholders to optimize and align the ICT investment portfolio.
- Research and design new ICT products and services to help build new effective solutions.
- Establish flexible and adaptable information, application and technology foundations.
- Establish and monitor security standards and architecture.
- Exercise comptrollership responsibilities and provide overall financial leadership for ICT.
- Coordinate and manage the use of ICT resources across the ICT program portfolio.
- Proactively manage ICT contracts and license agreements.
- Plan, recruit, allocate, evaluate, train and develop resources for ICT work.
- Manage the process of implementing major changes in ICT to reduce the risks and costs of change, and to optimize its benefits.
- Manage the relationship between ICT and clients to ensure needs are addressed.
- Provide client support in the day-to-day delivery of ICT services.
- Proactively monitor service and process outcomes in relation to service contract conditions and performance goals.
- Improve the efficiency and effectiveness of project delivery through application of standard project management practices.
- Develop, deploy and support critical ICT infrastructure services.
- Develop and integrate applications to create functional systems responsive to the requirements of clients' program delivery needs.
- Maintain and operate existing applications that support the delivery of government program services.

ICT SERVICES MANITOBA reports the following results in 2007/08

- Alignment of ICT investments with Government's overall strategic direction is on-going.
- The project to consolidate servers is continuing. This project will enable government to manage ICT services more cost effectively.
- Provided Wide Area network services (i.e. PDN services) to the health sector. Services are being augmented as necessary to support new Health IT initiatives.
- Provided a government-wide information security awareness program designed to educate staff on their responsibilities to protect the information entrusted to them.
- Implemented a collaboration service utilizing Sharepoint.
- Established an ICT Service Desk as a single point of contact for Department ICT Incidents and Services requests.
- Developed and implemented project management standards and methodology.
- Provided on-going problem resolution and system enhancement activities for all managed business applications.

- Participated in the development and implementation of the SMART Project – delivering an integrated solution to Accommodation Services (MIT).
- Delivered inventory solutions to both the Manitoba Development Center and the Selkirk Mental Heath Center re-using the component built under the SMART project.
- Implemented the SAP Business Intelligence and CRM infrastructure, installed the production instance of Solution Manager and activated the Early Watch system.
- Implemented Residential Tenancies eForms project, TAXcess, which enables Manitoba businesses to file, pay, and view business tax accounts, the Water Resource Management System and the House Book Issue Tracking System.
- Developed Phase 1 of the Microsoft Technical Solutions Architecture.
- Piloted development of standard processes for Application Management Services work.
- Developed and implemented an Information Technology Infrastructure Library (ITIL) based Change Management process for Manitoba's new server operations environment.
- Upgraded system software to support corporate applications.
- Improved performance of Parks Reservation System to handle opening day peak volumes.

18-4(a) Manitoba Information and Communication Technologies

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	15,524.0	193.72	16,729.8	(1,205.8)	
Total Other Expenditures	59,239.6		55,852.0	2,387.6	
Total Expenditures	**74,763.6**	**193.72**	**73,581.8**	**1,181.8**	

18-4(b) ICT Services Manitoba Recovery

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Less: Recoverable from other Appropriations	(47,692.1)		(46,747.5)	(944.6)	
Total Expenditures	**(47,692.1)**		**(46,747.5)**	**(944.6)**	

LEGISLATIVE BUILDING INFORMATION SYSTEMS

OBJECTIVES

To provide highly responsive ICT support services that address the business requirements of clients in the Legislative Building; Government, Legislative Assembly and Caucuses, by deploying and maintaining reliable systems in a secure technological environment.

ACTIVITIES/RESULTS

2007/08 Activities included:

- Direction and planning for information technology initiatives in the Legislative Building; Including providing consultation to Caucus groups and Legislative Assembly.
- Development and implementation of security strategies that monitor intrusions, detect viruses and enable recovery from disasters;
- Provision of desktop management services including help desk support, requirements analysis, purchasing and asset management;
- Management of server and communications infrastructure;
- Analysis, implementation and support of business applications; and
- Provision of consultative and project management services on in-house or outsourced requests.

In addition to provision of operational services major accomplishments for 2007/08 include:

- Performed an email migration which included upgrade to; Exchange 2007, Outlook Web Access 2007 and Blackberry Enterprise Server V4.1.
- Migrated application development and LBIS test environments over to Virtual server, thereby consolidating servers and minimizing associated hardware costs.
- Provide Treasury Division with consulting, technical, and project management services in support of various specialty applications. Upgraded Treasury server and consolidated File/Print and Application services onto a single server. Implemented a new tool (FINCAD) which provides analysis of capital markets financial instruments and derivatives. Upgraded Market services tools, software included are; Reuters Xtra 3000, Bloomberg and Candeal V7.05. Currently investigating a new web-based product, Treasura, which will provide market to market financial credit exposure and manage Debt Investments, Derivatives and Foreign Exchange. Implemented an Extranet solution in order to accommodate relocation of Treasury Division clients.
- Implementation of upgrades and enhancements to the corporate web-based Activity & Issues Management System (AIMS); ongoing performance tuning of the application and Oracle database. Upgraded new hardware & software to accommodate new IIS server.
- Upgraded the Media Streaming service to include archive capabilities for Question Period and Committee hearings.
- Created\enhancements to various custom applications, included are; Witness application; Orders in Council, Members Allowance System, Health Intake System, Events Registration site for Legislative Assembly Conference, News Media Services Photo Gallery system, Teacher's Institute and Classroom website and redesign of the LBIS Intranet website.
- Upgraded patch management system to latest release which now allows for automation of Office Suite upgrades for desktops.
- Migrated all government clients to new Bluecoat Proxy service.
- Migration of desktops to newer hardware with the most current office automation software as part of a four year refreshment cycle;
- Completed second year of a four year server refresh cycle with emphasis on consolidation of services. This included a refresh of all server hardware and a migration to the latest server and network operating systems;
- Upgraded all Antivirus\Anti-Spam software at desktop, server and gateway levels;
- Completed second year of a four year project to upgrade network infrastructure. This project is designed to upgrade the building communications infrastructure to increase security and accommodate growing bandwidth needs;
- Implemented a new service to allow Managed Environment clients remote network access from within the Legislative Building.

- Continued re-engineering and migration of custom applications to thin client technology;
- Implementation of applications for the Legislative Assembly to assist in the categorizing and search of documents;

18-4(c) Legislative Building Information Systems

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	902.5	13.00	1,016.2	(113.7)	
Total Other Expenditures	216.5		234.3	(17.8)	
Total Expenditures	**1,119.0**	**13.00**	**1,250.5**	**(131.5)**	

SERVICE TRANSFORMATION MANITOBA

Service Transformation Manitoba provides leadership for service delivery activities, operational transformation activities and the SAP implementation across the Government of Manitoba.

OBJECTIVES:

- To improve service delivery by modernizing government through achieving simplicity, developing partnerships, engaging technology, organizational innovation, streamlining and improving business interactions, and performance reporting.
- To provide leadership for improvement of service quality, citizen-centered service delivery and single window initiatives.
- To maximize the potential of the SAP enterprise resource planning tool.
- To facilitate operational transformation through operational reviews, change management, user transition, development of communication plans, training support and end-user role definition and readiness.
- To serve as a link to inter-jurisdictional committees and forums where information and knowledge on service delivery and operational transformation are exchanged.
- To provide support for Committees driving service delivery and operational transformation.

ACTIVITIES/RESULTS:

Activities undertaken in 2007/08:

- Take a leadership and policy role in influencing direction of the Corporate ICT Services Manitoba organization, government-wide technology and innovation efforts, and service improvement and transformation.
- Encourage innovation from provincial civil servants from all levels of government with the intent of cost savings and/or improving service for Manitobans.
- Continue to promote and implement Service Quality Partners and the Manitoba Service Excellence Awards.
- Conducted 68 employee and departmental surveys for various stakeholders.

- Develop a strategy for and assist in the deployment of online services for Manitobans.

- Continue to support the Single Window Service to Business initiative that is being led by the Department of Competitiveness, Training and Trade.
- Continue to assist with implementation of BizPal.
- Develop a comprehensive organizational change management framework to assist departments with service transformation activities.
- Develop tools, guidelines and reusable methodologies and practices relating to managing electronic information, identity management and authentication.
- Work with programs to develop improved methodologies, solutions, and understanding for transformation initiatives.
- Implement an Enterprise Resource Planning (ERP) Program Management Office to:
    - maximize Manitoba's SAP investment by leveraging the implementation of all opportunities where SAP is the most appropriate solution to a business need; and,
    - focus Manitoba's activities on service transformation through a solid business case approach that maximizes value and service delivery goals.

Service Transformation Manitoba reports the following results in 2007/08:

- Established the Service Transformation and Information, Communication, Technologies Executive Coordinating Committee to provide leadership and direction to departments involved in the implementation of government-wide ICT and service transformation projects.
- Promoted and implemented Service Quality Partners and the Manitoba Service Excellence Awards.
- Conducted 68 surveys for departments.
- Established an Inter-departmental Task Team to oversee the deployment of new citizen online services.
- Continuing to support the Single Window Service to Business Initiative.
- Provided assistance in the testing and deployment of new service tools including Microsoft Office communicator, web conferencing and video conferencing.
- Facilitated the deployment of BizPal to the City of Brandon and the City of Winnipeg.
- Developed a comprehensive organizational change management framework to assist departments with service transformation activities.
- Continued to develop tools, guidelines and reusable methodologies and practices relating to managing electronic information, identity management and authentication.
- Implemented a process for working with ICT Services Manitoba as a pilot to assist departments with their transformation initiatives.
- Formally established an SAP Program Management Office.

18-4(d) Service Transformation Manitoba

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	1,223.9	16.00	1,141.4	82.5	
Total Other Expenditures	530.4		589.8	(59.4)	
Total Expenditures	**1,754.3**	**16.00**	**1,731.2**	**23.1**	

MINERAL RESOURCES

MANITOBA GEOLOGICAL SURVEY

OBJECTIVES

The primary roles of the **Manitoba Geological Survey** (MGS) are to provide geoscience information to support and facilitate mineral exploration in the province, and to conduct a broad range of geoscience activities that address land-use and environmental issues facing Manitobans.

Program objectives are:

1. To increase the geoscientific knowledge base of the Province, primarily by conducting field studies and systematic bedrock and surficial mapping
2. To increase the effectiveness of mineral exploration activities in both established mining areas and in frontier areas through relevant geoscientific projects
3. To promote effective land use and resource management
4. To evaluate environmental impacts and geohazards
5. To develop products that respond to clients' increasing needs for digital information
6. To maximize the range and impact of geoscience investigations through collaboration with industry, Federal, university and other Provincial agencies
7. To provide minerals industry information to communities, aboriginal people, and the public at large, through outreach activities

The **Minerals Policy and Business Development** section of MGS is responsible for monitoring industry and commodity information used in formulating Manitoba's minerals policies, promoting mining and exploration investment opportunities, administration of Manitoba's mineral exploration incentive programs and organizing and staging of the annual Mining and Minerals Convention. The section also helps facilitate the provision of community adjustment services to communities facing mine closure. To achieve these goals, the Minerals Policy and Business Development section works closely with the Manitoba Geological Survey and the Mines Branch of Science, Technology, Energy and Mines, as well as all affected government departments.

ACTIVITIES/RESULTS

GEOSCIENCE PROGRAM

In 2007, the Manitoba Geological Survey (MGS) continued multiyear programs in the northern Superior Province, the Paleoproterozoic Flin Flon Belt, the eastern Kisseynew Domain and Thompson Nickel Belt (TNB), and the Bissett and Bird River regions of southeastern Manitoba. Phanerozoic investigations focused on posting new Williston Basin Targeted Geoscience Initiative (TGI) content to the project's website, expanding the study of the Devonian Three Forks Formation and completing the Surficial Geology Compilation Map Series. New field projects were initiated in the northern Superior Province, at Utik Lake, as the second year of a multiyear project aimed at updating the bedrock mapping database for greenstone belts in the region, and in the Notigi Lake area, as a contribution to the Targeted Geoscience Initiative III (TGI-3).

The program is reviewed annually by the Mineral Exploration Liaison Committee (MELC), composed of members of the Mining Association of Manitoba, the Manitoba Prospectors and Developers Association and the Manitoba-Saskatchewan Prospectors and Developers Association, as well as representatives from the universities of Manitoba and Brandon, and the Geological Survey of Canada (GSC).

Activities and results for 2007-08 are listed below as they pertain to overall Program objectives.

1. Increasing Manitoba's geoscience knowledge base

A significant portion of MGS work in 2007 was conducted as part of the federal government's Targeted Geoscience Initiative (TGI), a 5-year project that began in April 2005. This initiative provides a vehicle to partner with the Geological Survey of Canada (GSC) on priority projects aimed at improving the economic sustainability of mining towns in northern Manitoba. The project has been developed through joint provincial-federal-industry consultation and is delivered as a fully integrated partnership that includes the minerals industry, researchers from Canadian and American universities, and geologists from the MGS, the Saskatchewan Geological Survey (SGS) and the GSC.

As part of the MGS contribution to TGI-3, metavolcanic rocks in the Flin Flon area were mapped at 1:5000 scale. Using a combination of detailed volcanic facies analysis, structural mapping and geochemical characterization of each unit in the area, this mapping has extended the recently established Flin Flon–Callinan–Triple 7 mine stratigraphy from the Flin Flon mine area south to Schist Lake. In collaboration with MGS and SGS workers, Laurentian University researchers and graduate students continued detailed mapping in the footwall and hangingwall rocks of the Flin Flon, Callinan and Triple 7 deposits. The new and previous mapping in the Flin Flon area has been compiled and assembled into a 1:10 000 scale cross-border map to be published as part of the TGI-3 project.

The MGS and partners in the GSC continued a multiyear program, within TGI-3, aimed at defining the geographic extent of TNB-type inliers within what is currently mapped as younger Burntwood Group metaturbidite rocks in the northeastern Kisseynew Domain. Exciting and unexpected results from detailed mapping, isotopic and geochronological investigations have shown that Archean basement, together with a cover sequence, occur in this part of the Kisseynew Domain. This work has clear implications for nickel exploration, opening up new areas for consideration that would have been disregarded only five years ago. New mapping was undertaken in 2007 at Notigi Lake, on the north flank of the Kisseynew Domain northwest of Thompson, and in the Kawaweyak Lake area of the north easternmost Kisseynew Domain. Work led by the GSC in the northeastern Kisseynew Domain aims to delimit the distribution of Archean basement and Ospwagan Group–like supracrustal rocks within what is currently depicted as Burntwood Group metasedimentary rocks.

Components of the Flin Flon project funded by the GSC that were conducted in or adjacent to Manitoba also include

- collection and subsequent analysis of approximately 45 km of two-dimensional (2-D) seismic profile data at Flin Flon; in addition, Hudson Bay Exploration and Development Co. Ltd. has separately contracted additional 2-D profiles and a 3-D seismic survey at Flin Flon;
- a high-resolution aeromagnetic survey in the eastern Kisseynew Domain area, building on a 2006 survey on the west flank of the Thompson Nickel Belt;
- Quaternary mapping and sampling in the Sherridon, Snow Lake and eastern Kisseynew Domain areas; and
- borehole-geophysical-data processing (rock property data) as an input into the seismic studies subproject.

Within the Thompson Nickel Belt proper, the objective of a continuing Ph.D. study on regional metamorphism is to better understand the tectonic evolution of the belt. Documenting the Ospwagan Group at various metamorphic grades will assist in the identification of these prospective rocks during exploration programs, especially in portions of the belt that have been subjected to higher grades of metamorphism.

An Archean mafic metavolcanic–dominated greenstone belt at Utik Lake in central Manitoba was mapped and studied in detail to determine the nature, age and composition of the supracrustal rocks. Work also included an analysis of the kinematics and structural evolution of the Utik Lake greenstone belt, and an assessment of the potential of the area to host volcanogenic massive sulphide and gold deposits. Together with 2006 mapping in the nearby Bear Lake area, this study will provide an improved geological context and regional framework for base- and precious-metal exploration in the northern Superior Province.

In southern Manitoba, the 'Williston Basin Architecture and Hydrocarbon Potential' TGI-2 project, which ended in March 2005, continued to complete and publish project products. During 2006, more than 200 isopach and structure contour maps were produced for the Williston Basin TGI-2 project, using a standardized database combining Manitoba and Saskatchewan data. Work continued through 2007 on finalizing databases and producing maps for the upper parts of the stratigraphic section.

Three coreholes were drilled in the 2007 Stratigraphic Corehole Drilling Program. One hole near Duck Bay, west of Lake Winnipegosis, penetrated what is interpreted as hydrothermally altered dolomite within the upper part of the Silurian Interlake Group, beneath the Devonian Ashern Formation. This discovery, if confirmed, would be significant because the leached limestone and dolomite could potentially host Mississippi Valley–type Pb-Zn mineralization, explaining the sulphide mineralization found, for example, near Pemmican Island in the north basin of Lake Winnipegosis.

The discovery of the Sinclair Field in southwestern Manitoba has substantially increased Manitoba's oil reserves and coincided with the TGI-2 cross border correlations. New work was also conducted on the Devonian Three Forks Formation hosting the newly-discovered Sinclair Field, with proven and probable reserves estimated at 6.8 million m^3. A number of new exploration targets were identified in this study, northward and eastward of the Sinclair Field.

The Surficial Geology Compilation Map Series (SGCMS) has been completed and was released on November 15, 2007 on DVD (second edition) and as a hard copy, 1:1 000 000 scale surficial geology map. The SGCMS provides seamless, province-wide coverage of all the most current and detailed surficial geology available. These data are useful for applications such as groundwater protection, land management and mineral exploration.

2. Increasing the effectiveness of mineral exploration activities

Bedrock geological mapping in the Lily Lake area of the Rice Lake greenstone belt improved understanding of the stratigraphy and structure of the belt, as well as the nature and setting of its contained gold occurrences. The most significant gold occurrences are hosted by a distinctive association of rock types and are spatially associated within a deformation corridor, and are similar to gold deposits elsewhere in the Archean in Canada.

The third year of a government-industry-university geoscience partnership in the Bird River Belt of southeastern Manitoba was completed in 2007. Partners in the initiative include MGS, researchers and graduate students at the University of Waterloo (partially funded by Gossan Resources Limited, Mustang Minerals Corp., Tantalum Mining Corporation of Canada Limited (Tanco), the university and the Natural Sciences and Engineering Research Council of Canada). Field investigations in 2007 by a University of Waterloo postdoctoral fellow have highlighted the kinematic pattern of a major shear zone separating the English River Subprovince from the Bird River greenstone belt. MGS regional and detailed stratigraphic mapping, geochemical and geochronological investigations within the Bird River greenstone belt have resulted in a revised stratigraphic framework for the belt and a context for mineralization.

A metallogenic and metamorphic study of selected gold-bearing deposits from Snow Lake and the southern flank of the Kisseynew Domain by a McGill University Ph.D. candidate, supported by the MGS and the GSC, will provide new constraints on the timing of mineralization and a better understanding of the mineralogical and compositional consequences of metamorphism on sulphide-dominated ore.

Industrial minerals potential was investigated in the Rural Municipalities of Miniota, Archie and Rossburn in southwestern Manitoba. Undeveloped deposits of Souris-type gravel, swelling sodium bentonite, potash and sodium chlorate, or manganese are present in some of the rural municipalities and would help to diversify their economic base.

3. Promoting effective land use and resource management

The Rural Municipality of Park was mapped this year to update aggregate information for land-use planning. The nature of the landscape and proximity to Riding Mountain National Park have resulted in increased recreational development, which has in turn put increasing land-use pressure on aggregate deposits in some parts of the municipality. Field results suggest that the volume of aggregate in the areas of the nearby active pits is more than adequate to meet the current and projected needs, but land-use planning decisions need to take these important resources into account so they can continue to be utilized.

4. Evaluation of environmental impacts and geohazards

A continuing Ph.D. study supported by MGS uses a network of 54 tree-ring records to estimate changes in summer climate within the Winnipeg River basin since AD 1783. The Winnipeg River in northwestern Ontario provides nearly half of the total flow into Lake Winnipeg and the Nelson River, and is the most important component of the hydroelectric system that generates power for Manitoba. This research program has demonstrated that, unlike most regional rivers, flow in the Winnipeg River system increased during the 20th century, with most of the gains occurring between 1920 and 1960.

University of Manitoba researchers continued with a program investigating the revegetation of mine tailings. A small-scale field experiment was designed in 2007 to test the effects of rototilling, fertilizing, microbial inoculation and amending Gunnar tailings with paper-mill sludge on plant establishment and growth.

5. Development of products that respond to clients' increasing needs for digital information

In 2007–2008, the MGS published five open file reports, the 2007 Report of Activities, six preliminary maps, one final map with marginal notes, one surficial map compilation for all of Manitoba, and three data repository items. In response to client needs, the majority of the publications were released as hard copy, CD-ROM, or DVD for purchase through Publication Sales, and in electronic format for free download via the Web.

The MGS has now completed the design of a searchable Oracle© database to replace the existing mineral deposit information that is accessed through the GIS Map Gallery. In the newly designed database, contained information will summarize all of the nonconfidential work that has been performed on specific properties. References included in the database allow users to find additional information for occurrences.

6. Collaboration with industry, Federal, university and other provincial agencies

The Manitoba Geological Survey is engaged in many partnered initiatives, including contributions from the federal government, the mineral industry and several Canadian universities. Partnerships added approximately $1.4 million to geoscience programming in Manitoba for 2007–2008, and represent significant leverage of the MGS geoscience budget. The projects facilitate the training of future geoscience professionals, including in 2007 one postdoctoral fellow, two Ph.D. candidates and one M.Sc. candidate. Primary focuses for partnerships in 2007 were the Flin Flon TGI-3 project and the Bird River suite of projects.

In 2007-08 MGS participated actively in a number of interdepartmental initiatives, including:

1. Protected Areas Initiative (Conservation), as a partner in the Mining Sector Consultation, through the provision of geological and geophysical maps and assessments of mineral, aggregate and industrial mineral potential.
2. Watershed planning initiatives (Water Stewardship), through the provision of surficial geology and aggregate data and interpretation.
3. Groundwater initiatives (Water Stewardship).
4. Aggregate resource assessments (Transportation), for aggregate resource assessments in Manitoba rural municipalities.
5. Aboriginal Consultation Interdepartmental Working Group, assisting in the development of a Consultation policy for the Province.
6. WNO Interdepartmental Working Group, providing mineral exploration and mining information for the east side of Lake Winnipeg.

7. Providing minerals industry information through outreach activities

Manitoba Geological Survey mineral-education outreach initiatives included the Manitoba Mining and Minerals Convention Schools Program, National Engineering and Geoscience Week, Earth Science Week and Provincial Mining Week. Despite inclement weather, the outdoor Provincial Mining Week event drew more than 2500 visitors. In August, the MGS partnered with the Manitoba Children's Museum for the first time to help celebrate the museum's Earth Science Week; 158 people participated in the MGS-sponsored activities.

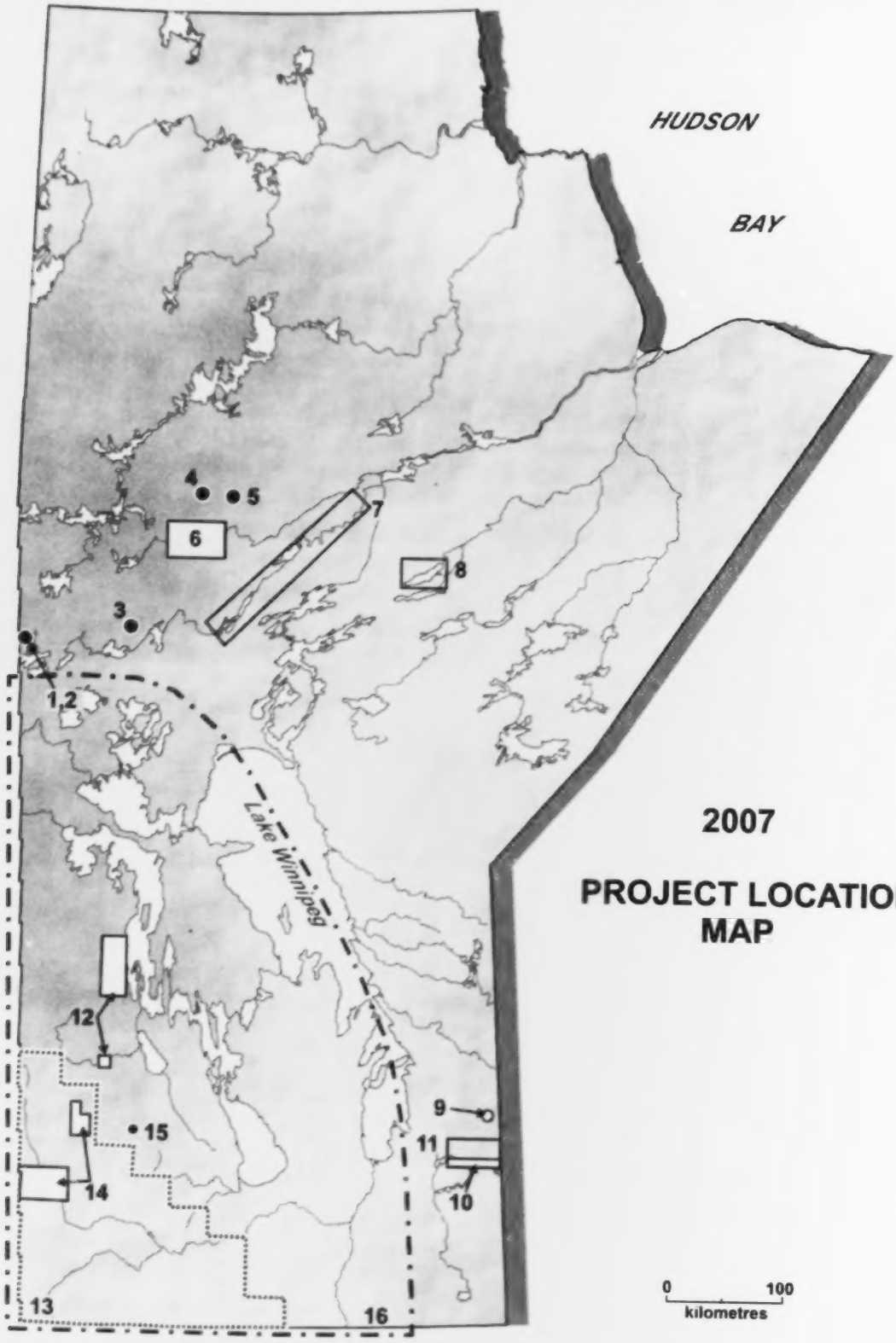
The fourth annual Aboriginal Mining Workshop was held as part of the November 2007 Manitoba Mining and Minerals Convention. The workshop focused on how communities can benefit from mineral exploration activity in their regions.

Survey staff delivered mining and geology presentations to Aboriginal communities at Fox Lake Cree Nation, Northlands First Nation and the Nelson House Resource Management Board, as well as Wolseley School, the Winnipeg Rock and Mineral Club and the Mineral Society of Manitoba. In addition, staff attended such Aboriginal conferences as Vision Quest and the Canadian Aboriginal Minerals Association.

Regional Offices

The Flin Flon office continued to provide technical and regulatory assistance to the mining and mineral-exploration communities in northwestern Manitoba. These activities included recording new mineral claims and accepting applications and submissions required under The Mines and Minerals Act, answering claim-status and other Act-related inquiries, and maintaining a collection of current claim and land-status maps for the Province of Manitoba.

Mineral Resources Division drillcore storage facilities are located in Winnipeg (Midland and Brady Road), The Pas, Flin Flon, Thompson and Lynn Lake. Clients can access drillcore for viewing and study at these locations. Six of the core libraries have lighted, heated inspection rooms with benches, and most have core splitters. It is estimated that the Manitoba Geological Survey's Precambrian drillcore libraries currently contain more than 260 000 m of core.


HUDSON
BAY
Lake Winnipeg
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15
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2007
PROJECT LOCATION MAP
0
100
kilometres

Map Legend **Location of Projects 2007/2008**

1	Implications of new geological mapping, geochemistry and Sm-Nd isotope data, Flin Flon area
2	Geology of the Hook Lake Block, Flin Flon
3	Investigation of a Pb-Ag-Au-rich hangingwall in lens 4 of the Chisel North mine, Snow Lake
4	Preliminary stratigraphy and structure of the Notigi Lake area
5	Unique amphibolite-iron formation assemblage in the Kawaweyak Lake area
6	New field and geochronological results for the Osik-Atik-Footprint lakes areas
7	Hudsonian regional metamorphism in the Thompson Nickel Belt
8	Nature, evolution and gold potential of the Utik Lake greenstone belt
9	Stratigraphic and structural setting of gold mineralization in the Lily Lake, Rice Lake greenstone belt
10	Stratigraphic investigations in the Bird River greenstone belt
11	Structural geology and kinematic evolution of the Bird River greenstone belt
12	Manitoba Geological Survey's Stratigraphic Corehole Drilling Program, 2007
13	Devonian Three Forks Formation preliminary hydrocarbon and stratigraphic investigations
14	Industrial mineral potential of the rural municipalities of Miniota, Archie and Rossburn
15	Aggregate resources in the Rural Municipality of Park
16	Summary of investigations for the Sedimentary and Industrial Minerals Section

MINERALS POLICY AND BUSINESS DEVELOPMENT

The Minerals Policy and Business Development section is responsible for monitoring industry and commodity information used in formulating Manitoba's minerals policies, promoting mining and exploration investment opportunities organizing and staging of the annual Mines and Minerals Convention and administering the Mineral Exploration Assistance Program (MEAP), Manitoba Prospectors Assistance Program (MPAP) and the Manitoba Mineral Exploration Tax Credit (MMETC). The section also helps facilitate the provision of community adjustment services to communities facing mine closure. To achieve these goals, the Minerals Policy and Business Development section works closely with the Manitoba Geological Survey and the Mines Branch of Science, Technology, Energy and Mines and all affected government departments.

On a global scale, the mining industry has continued its momentum established in 2004 due to increased commodity prices coupled with the ability for junior explorers to raise exploration funds. Exploration levels in the province continue to increase and Manitoba continues to generate positive news. After gaining international recognition in the 1999 Fraser Institute survey of mining companies as 'one of the best places in the world to invest in exploration and mining', frontier exploration, particularly for gold, nickel and diamonds, has dramatically expanded. Natural Resources Canada reports that off-site mineral exploration expenditures have increased from under $20 million in 1999 to an estimated $87+ million in 2007. The search for diamonds continues to generate exploration activity in northeast Manitoba.

In addition, Hudson Bay Mining and Smelting and CVRD Inco Limited continue major investments to ensure their operations remain in Manitoba until at least 2016.

The section continued to build relationships with exploration and mining companies by promoting the advantages of investing in Manitoba. The benefits of these relationships are not always realized immediately. Mineral exploration and mine development are long-term endeavours with inherent risks. Over the years, however, all Manitobans have benefited from a healthy minerals sector that has grown to be the second largest primary resource industry in Manitoba, with a value of over $2.5 billion in 2007.

The responsibilities of the Minerals Policy and Business Development section are implemented on a wide variety of fronts that include strategic business development including minerals policy, focussed client service, mining community development and administration of the minerals incentives programs.

Strategic Business Development - To effectively promote Manitoba's mineral investment advantages, it is important to understand industry trends and needs. Where possible, it is also necessary to contribute to the policies and initiatives that can impact mineral investment in a positive and sustainable way. Section representatives participated on various committees such the Manitoba Mining Tax Committee, Intergovernmental Working Group subcommittees on exploration tax credits, resource tax reform and aboriginal participation in mining, and the Protected Areas Mineral Liaison Committee.

Competition for the exploration dollar has become international in scope and if we are to maintain a healthy and sustainable mining industry in the province it is critical to elevate the profile of Manitoba's mineral endowment and positive business environment. Section personnel conducted focused marketing initiatives and attended major industry conferences to attract exploration dollars to the province. The impact of Manitoba's policy climate in attracting mineral investment was recognized again in the 2007 Fraser Institute survey of mining companies, in which the province placed in the top 5 in the world amongst mining jurisdictions for having a policy environment that encourages mining investment. Survey results represent the opinions of exploration managers in mining companies operating around the world.

In addition, the Department worked collaboratively with local prospectors groups and Manitoba's mining communities to promote mineral and business opportunities in and around those communities through a Team Manitoba approach.

Conventions and Trade Shows - Investment opportunities were promoted through trade show displays and direct marketing efforts at the following major mining and exploration events:

- Prospectors and Developers Association of Canada (PDAC) - Toronto (20,162 in attendance)
- Mineral Exploration Roundup - Vancouver (6,700 in attendance)

Team Manitoba - a collaborative effort between Manitoba's mining communities, mineral property holders and staff from Science, Technology, Energy and Mines, was also successful in promoting mineral investment. Working together, the Team, including mayors from Manitoba's mining communities, provided a unified front to potential investors at the Prospectors and Developers Association of Canada Conference and at the Manitoba Mining and Minerals Convention.

Client Service - Minerals Policy and Business Development, in co-operation with other Branches and government departments, provided advice and direction to help new mining and exploration companies adjust to operating in a new jurisdiction or existing companies embarking on new ventures. This client assistance was provided in both an interdepartmental team approach and through issue driven individual service.

Community Development - activities undertaken by the section include participating in and co-ordinating various initiatives related to mine closure, including facilitating community adjustment and community economic development. The purpose of these activities is to help ameliorate the effects of mine closure on, and contribute to, the long-term viability of mining communities.

The department, with Intergovernmental Affairs and Labour and Immigration took the lead in organizing an interdepartmental working group to deal with mine closure at Lynn Lake and Leaf Rapids. This core group grew into a government Steering Committee that is presently addressing both local and regional issues in the Lynn Lake – Leaf Rapids area and impacts of mine closure in Snow Lake. In addition to increased government geological programming in this region, the government is providing funding assistance from the Mining Community Reserve to help each community deal with the effects of mine closure and plan for future economic development.

Manitoba Mining and Minerals Convention - the annual Manitoba Mining and Minerals Convention hosted approximately 1,000 industry participants. The convention provided a venue for stakeholders to acquire the latest government geological information releases, interact with the exploration and mining services sector and discover new business opportunities. The convention theme, "Manitoba means Business" reflected the mining sector's vibrant presence in Manitoba as well as Manitoba's enormous untapped mineral potential, and the many opportunities that exist for further exploration in our geologically diverse province. In 2007, the convention hosted a total of 66 trade show booths and 33 presentations. In addition, 43 mineral property booths and 29 geological posters were featured. The Manitoba Mining and Minerals Convention 2008 will be held November 20, 21 and 22 at the Winnipeg Convention Centre.

Exploration Incentives - The continuation of mineral incentive programs such as the Mineral Exploration Assistance Program (MEAP), Manitoba Prospectors Assistance Program (MPAP) and the Manitoba Mineral Exploration Tax Credit (MMETC) sends a positive message to industry that Manitoba is serious about attracting investment and supporting industry in times of heightened competition for the global exploration dollar. All programs were administered by the Minerals Policy and Business Development section and reported under 18-5(e).

18-5(a) Manitoba Geological Survey

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	3,687.0	55.10	3,732.6	(45.6)	
Total Other Expenditures	1,620.0		1,806.6	(186.6)	
Total Expenditures	**5,307.0**	**55.10**	**5,539.2**	**(232.2)**	

MINES

OBJECTIVES

The Mines Branch administers legislation governing the disposition of mineral rights (permits, claims and leases), exploration, development, production of the province's non-fuel mineral resources and rehabilitation of mines and quarries. The branch comprises three sections; Mining Recording, Mining Engineering and Inspection, and Assessment.

ACTIVITIES/RESULTS

Other activities performed by the Mines Branch staff included the continuing compilation of an inventory of the provinces aggregate resources and administration of provincial land-use policies that deal with the conservation of mineral resources. The Branch continues it's representation on the sub-committee of IGWG on Mine Environment Neutral Drainage (MEND) Committee and the Federal/Provincial Technical Committee on Mineral Statistics. Branch staff participated in a number of technical seminars, conferences and mine rescue competition.

In 2007/08 the branch entered the 16th year of a substantial program for the rehabilitation of aggregate pits and quarries throughout the province. Under the Orphan and Abandoned Mine Site Program, the total expenditure for FY 2007/08 was $5,353,062. The rehabilitation work addressed some of the critical safety and environmental issues at the Sherridon, Lynn Lake, God's Lake and Ruttan mine sites and 10 smaller mine sites in the Bissett / West Hawk areas. In accordance with the Mine Closure Regulation, owners/operators of the province's operating and inactive mines submitted closure plans and proposals for review and comments.

Mining Recording Section

Mining Recording offices are located in Winnipeg and Flin Flon.

Mining Recording Offices maintain up-to-date records of mineral dispositions and leases and all legal transactions that relate to mineral dispositions and leases as required by legislation. The general public can access the computer data base on mining claims and permits, quarry leases, quarry surface leases, quarry exploration permits and potash dispositions through terminals located in each of the offices. The Mines Branch is currently in the process of determining the feasibility of online submissions and map staking.

The Mining Recording Section processes applications for mineral dispositions, leases, monitors and inspects the activities of disposition and lease holders for compliance with requirements of The Mines and Minerals Act and Regulations, and collects fees, rentals, royalties, rehabilitation levies, taxes and cash security deposits payable under the Regulations. The total revenue collected by the Section during the fiscal year 2007/08 was $4,529,630 and the rehabilitation levy collected, including interest, on the removal of aggregate material was $2,097,131 for the same period.

During the calendar year 2007, 963 mining claims and 58 mineral exploration licenses were recorded covering a total of 1,047,164 hectares. Concurrently, 44 quarry mineral leases, 763 casual quarry permits and 769 registration certificates for private pits and quarries were also issued during the same period. Details of the types of mineral dispositions and leases issued and in good standing in 2007 are shown on the following page.

Industrial minerals exploration activities intensified throughout 2007/08 in the search of potash and high calcium limestone. The Mining Recording Office staff issued nine new exploration permits covering 54,514 hectares for potash and 1,209 hectares for high calcium limestone. In addition staff are processing seven new exploration permit applications for potash covering 420,240 hectares in south western Manitoba.

MINERAL DISPOSITIONS ISSUED EACH CALENDAR YEAR 2004 – 2007

	2004		2005		2006		2007	
	No.	Hectares	No.	Hectares	No.	Hectares	No.	Hectares
Mining								
Mining Claims	821	177,402	458	83,524	738	163,283	963	209,197
Mineral Exploration Licences	72	1,436,123	68	2,658,314	26	838,968	58	837,967
Mineral Leases	1	61	-	-	-	-	-	-
Quarrying								
Leases	55	2,072	37	1,376	65	2,693	44	7,172
Exploration Permits	-	-	4	845	2	225	9	54,514
Casual Quarry Permits	706	-	758	-	758	-	763	
Peat								
Leases	5	287	3	477	2	402	4	556
Exploration Permits					1	1,243		
Private Aggregate Registration Certificates	785	-	774	-	769	-	934	-

MINERAL DISPOSITIONS IN GOOD STANDING AT CALENDAR YEAR END 2004 - 2007

	2004		2005		2006		2007	
	No.	Hectares	No.	Hectares	No.	Hectares	No.	Hectares
Mining								
Mining Claims	5,470	875,135	5,056	769,800	5,248	802,269	6,005	971,439
Order-In-Council Leases	3,653	120,562	3,653	120,562	3,653	120,562	3,653	120,562
Mineral Exploration Licenses	113	2,497,144	152	4,613,743	132	3,810,142	156	2,646,058
Special Permits	1	25,765	--	--	--	--	-	-
Mineral leases	257	25,765	254	23,424	253	23,416	253	23,416
Potash								
Leases	1	5,787	1	5,787	1	5,787	1	5,787
Exploration Permits	-	-	1	45,212	1	45,212	2	54,514
Quarrying								
Leases	830	38,145	824	38,586	856	40,726	866	46,760
Exploration Permits	2	79	4	846	1	525	12	102,447
Peat								
Leases	141	21,763	145	22,243	146	22,683	150	23,238
Exploration Permits	-	-	-		1	1,018	1	1,018
TOTAL	10,100	2,639,729	36,233	3,595,296	10,090	5,640,203	11,099	3,315,239

Mining Engineering and Inspection

The primary purpose of the Mining Engineering and Inspection Section is to facilitate and encourage sound exploration, mining and rehabilitation practices in the province consistent with the principles of sustainable development and in compliance with The Mines and Minerals Act. It also provides land management and advisory services in support of provincial legislative and regulatory land use and resource management initiatives.

Staffs monitor mining activity in Manitoba to ensure compliance with requirements under The Mines and Minerals Act including licenses, registrations, permits, leases, closure plan submissions, royalty/levy charges on production, and environmental operation standards. In 2007/08 inspection staff conducted field inspections to ensure mining compliance at quarry lease and casual quarry permit locations, private pit/quarry operations and site rehabilitation projects.

Orphan Mines Site Rehabilitation Program
Mines Branch Expenditures 2007/08

Mine Site	Approved Budget ($)	Expenditure ($)
Orphan/Abandoned Mine Sites	710,000	557,550
Sherridon	1,150,000	544,167
Snow Lake	100,000	0
Gods Lake	460,000	461,966
Lynn Lake	4,275,000	3,308,523
Engineering Fees		480,856
Total	6,695,000	5,353,062

Expenditures 2007/08

Sherridon: An implementation plan for rehabilitation of the mine site developed. Site investigation and detail engineering is underway.

Lynn Lake: Work was carried on at Lynn Lake to review alternatives for implementing rehabilitation of the East Tailings Management Area (ETMA). Work carried out: Ground Water Modeling, Permeable Reactive Barrier installation, revegetation, large test plots, drainage ditch and miscellaneous dam repairs. Farley Headframe was demolished.

Ruttan: As of January 2005 the environmental liability was transferred to the Province. Hazco completed work on the first phase of the revegetation of the mine site in November 2007.

High Hazard Mine Sites Rehabilitation

In 2006, AMEC completed inspection of 144 orphaned/abandoned mine sites identified by the Department. The inspections included a detailed safety and environmental hazard assessment of each site; an outline of the work required to mitigate the hazards and rehabilitate the site; and a cost estimate for the mitigation and rehabilitation work. Work commenced at the following sites: Emperor Shaft, Poundmaker Shaft, Waverley Shaft, Thompson Shaft, Dumbarton Shaft, Packsack Shaft, Grand Central Shaft, Vanson Shaft and Golden Pocket.

God's Lake

Mines Branch undertook the demolition of the 50 km power line in God's Lake area as part of the site rehabilitation. More work is planned for 2008/09 in the area.

General

Mines Branch staff participated on various interdepartmental technical review committees. Staff took part in judging the Provincial Mine Rescue Competition in Thompson.

Several mine closure plans for operating metal mines, inactive mines and for industrial mineral quarries were reviewed by Mines Branch staff and the closure plans were approved by the Director of Mines.

The Mines and Minerals Act, proclaimed in 1992, introduced a program to address the rehabilitation of pits and aggregate quarries in the province. Aggregate producers pay an annual levy based on the tonnes that they've produced and this money is set aside in a fund to be used for pit and quarry rehabilitation. On the basis of aggregate production from private and Crown lands in fiscal year 2007/08 approximately $1.9 million was contributed to this Quarry Rehabilitation Fund, with over 86 rehabilitation projects being completed at a cost of $1.3 million. The total number of projects completed since 1992 comprise approximately 7,249 hectares of land rehabilitated. All the work has been undertaken through private equipment rental agreements or tendered contracts with private operators, administered and monitored by branch inspection staff.

Sustainable Land Planning Services

Manitoba has enacted several resource management acts to manage land and natural resources as well as improve the economy and protect the environment. The mineral resource/land management program facilitates mineral resource and land stewardship in the various provincial and municipal land and resource use management planning processes. Program objectives for resource stewardship are to help facilitate the provincial interest in natural resources, manage land, and accommodate environmental management. Program goals are directed at facilitating responsible mining and resource development, protecting the environment, minimizing land and resource use conflicts and providing high quality land and resource management planning and advisory services to planning authorities, industry and other land management stakeholders.

Program goals also include providing secretarial support to the Surface Rights Board and assisting Manitoba in the transition to sustainability. The implementation of the program is as follows:

Crown Land Planning

The management, classifying and policy development for Crown land in Agro-Manitoba is the responsibility of the Bloc Panning Committees. Major activities of the Crown land management process include developing and implementing Crown land plans, developing Crown land use codes and policy and supervising land use on Crown lands through an integrated management process. Other significant land management activities include evaluating Crown land sale and use proposals, providing technical advice and information on resource management activities and facilitating land designation under various resource management acts. Land management provides planning services related to:

- Crown land sales
- Crown land exchanges
- Crown land planning and development
- allocation of use
- integration of use
- protection, conservation and sustainability of provincial natural resources.

Municipal Planning

All land sale, exchange codes and other administrative requirements are facilitated by Land Management. The Planning Act governs land use planning and development in Manitoba. The legislation provides municipalities and planning districts with the authority to create and adopt a Development Plan and Zoning By-law. Land management is actively involved in providing the legislatively based land planning processes and stakeholders with technical products, advice and technical positions on land planning matters. Support services include reviewing policy and development proposals and ensuring that the province's non-renewable mineral resources are not sterilized by development, preparing mineral resource management technical reports and products that help facilitate mineral resource management, and providing professional planning advisory assistance to the subdivision review and conditional use processes. Other significant planning services include policy reviews of plans and zoning by-laws, public consultation and supporting planning appeal Boards. Land Management is responsible for the interpretation and application of Provincial Land Use Policy #9, MR 184/94. The Provincial Land Use Policy for minerals is currently being revised to strengthen its intent and provide clarity concerning

protecting mineral resources. The regulation has recently been vetted through Interdepartmental Review Committee prior to broader public consultations.

Land Use Assessment

Land Management provides technical support and advice to many provincial legislative land use review and assessment processes. Land use proposals are assessed to ensure that the province's mineral resources are not sterilized by development and to ensure that land use conflicts are identified and mitigated. Land use proposals that are assessed are subdivision applications, Crown land sales, zoning and policy memorandum as well as Crown surface encumbrances with the view of documenting land use, tenure and environmental conflicts. This activity directly supports interdepartmental and intergovernmental planning and resource management activities. A total of 1598 land use proposals were assessed for potential land use conflicts to ensure that the Province's mineral resources were not sterilized by surface development. A new policy and procedure and related process was created and implemented for mineral access rights. In addition, Land Management has partnered with development proponents in large complex surface, mineral and sand and gravel rights ownership to document and interpret various tenures and to help resolve ownership concerns including Agrium and San Gold Corporation.

Sustainability

The Sustainable Development Act was proclaimed on July 1, 1998. The Act creates a legal framework through which sustainable development will be implemented in the public sector and encouraged in private industry and society. An implementation process has been recently initiated and approved by Manitoba, and land management is currently providing technical support to many different provincial working groups and processes. Technical support is provided to COSDI, Codes of Practice, sustainability reporting, and financial management. Other important initiatives include sectoral strategies under the provincial land and water initiative. Land Management also provides technical support to the Sustainable Development Innovations Fund by reviewing technical reports and participating in the approving committee. The principles of sustainable development are being codified into Municipal Plans, Crown Land plans and Zoning By-laws.

Protected Areas Initiative

Manitoba has initiated a program to protect representative landscapes and ecosystems from logging, mining and hydro development. Currently, 8.3% of Manitoba is legally protected from mining development with an additional 5.7% supported for protection by the mining sector. Mines Branch plays an important technical role in the process by legally withdrawing Crown mining rights from mineral exploration, development and extraction to protect critical habitat from mining activities. It also provides land tenure information and other support to the stakeholder approval process. A new policy and process for protecting Rank 1 Crown mineral rights from exploration and development was implemented. The intent is to provide comprehensive legal security to the protected lands and ensure that they are protected until the stakeholder consultation process is completed.

Treaty Land Entitlement

Progress was made towards meeting provincial obligations for Treaty Land Entitlement, Northern Flood Agreement and Grand Rapids Forebay Agreement in accordance with these legal agreement requirements. Land selections containing valid mineral dispositions in good standing were documented and technical support to the selection process was provided. Staff participated in resolving tenure conflicts associated with land selections and also provided procedural and policy advice. This year, special emphasis has been placed on improving procedures to help expedite approved land selections.

Public Outreach

Land Management also provide educational and outreach services facilitating sustainability, mineral resource management to various land management boards, municipal councils, industry and the public. Public outreach services include presentations, workshops, and internet access to land management issues, policies, practices to ensure that there is an opportunity for public involvement and discussion regarding resource management issues. Activities include oral and poster presentations at conferences, workshops, public meetings and direct stakeholder consultations concerning mineral resource management. This activity helps facilitate informed decision making by land management boards, industry, and the public. Highlights for 2007 include providing public outreach to Manitoba's cottage lot program, assisting Manitoba prospectors in land tenure issues, and providing technical support to Watershed Management Boards. A special technical session for land access issues was facilitated at last year's Western Canada's Surface Rights Board Conference hosted by Manitoba in June 2007.

Assessment Section

The Section receives and evaluates reports of required work submitted under The Mines and Minerals Act to ensure compliance with legislation and acceptable industry standards. At first confidential, these reports are eventually transferred to the non-confidential assessment library open to the public. These reports are indexed, microfilmed and scanned. Clients can view reports in our office or on the website.

Copies can be obtained by printing them directly from the website or ordering them from the Assessment Library. These reports are available on line, on paper, microfilm or compact disc.

The Section also provides advice to the Review Panel and Administrator of the Mineral Exploration Assistance Program on the merits and validity of the projects, acceptance of final reports and recommendations on payment or non-payment of grants.

The Section monitors mining exploration activities in the province and contributes to the preparation of reports on industry activity. It also acts as liaison between Natural Resources Canada and the mining industry for the gathering of statistics on exploration and production.

At the request of the Manitoba Securities Commission, the section reviews technical submissions on mining projects to ensure that they conform with the reporting standards set out in National Instrument 43-101 - Standards of Disclosure for Mineral Projects. Four projects were reviewed during the past year.

	2004	2005	2006	2007
Reports of work added to assessment library	124	133	110	99
Reports transferred to non-confidential status	107	2755	67	106
PRIVATE SECTOR:				
Website Visits	6,621	2,728	7,922	10,709
Visits	173	130	108	139
Reports examined	1,048	652	552	635
Reports duplicated for clients	323	282	268	310
CD'S duplicated for clients	3	43	30	45
DEPARTMENTAL STAFF:				
Reports examined	893	258	301	147
Reports duplicated for staff	33	14	28	12
Microfiche duplicated for Winnipeg and Northern Offices	2,711	2,157	879	469

18-5(b) Mines

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries and Employee Benefits	1,240.4	26.00	1,369.4	(129.0)	
Total Other Expenditures	589.4		705.3	(115.9)	
Total Expenditures	**1,829.8**	**26.00**	**2,074.7**	**(244.9)**	

PETROLEUM

OBJECTIVE

To provide for and encourage the safe and efficient development of Manitoba's oil and gas resources in accordance with the principles of sustainable development.

ACTIVITIES/RESULTS

Manitoba's oil and gas sector, though small by national or international standards, is a significant component of the provincial economy particularly in the South Western part of the province.

In 2007, Manitoba produced 1,277,066.1 cubic metres of oil (8.04 million barrels) having a total value of approximately $613 million. This is equivalent to about 35 percent of the province's refined petroleum products needs. Since there are no refineries in Manitoba all of the province's production is exported through the Enbridge pipeline system to refiners in Ontario and the US.

In 2007, the petroleum industry spent $300 million in Manitoba to explore for and develop Manitoba's oil and gas resources, to operate over 3000 wells and transport crude oil and refined petroleum products within the province.

The Sinclair Field located 35 km Southwest of Virden continued to be expanded. As of March 31, 2007 the field has over 700 producing oil wells. In 2007, Sinclair contributed 43% of the total provincial production. The Department estimates that the current proven developed and probable oil reserves of the field to be 6.8 million cubic metres.

It is estimated that the petroleum industry in Manitoba provides direct employment for approximately 450-500 Manitobans and indirect employment for at least that many people.

In 2007/08, royalties, production taxes and revenue from the administration of Crown owned oil and gas rights and fees added $17.3 million to the Provincial treasury. Significant revenues were also collected by the province through income taxes, retail sales tax, corporation capital tax, payroll tax and fuel taxes. In addition, the industry paid approximately $3.0 million in property taxes to the various municipalities where oil wells and facilities are located.

The Branch administers The Oil and Gas Act and related regulations governing the exploration, development, production, transportation and storage of crude oil and natural gas. The Branch is also responsible for The Oil and Gas Production Tax Act. Additionally, officers and inspectors of the Branch are designated as Workplace Safety and Health Officers under The Workplace Safety and Health Act with respect to oilfield operations. The inspectors also act as industry's first point of contact with regard to oil field related environmental issues.

In February 2007 changes were made to the Water Injection Incentive which allows better use of holiday volumes by removing the production ceilings for eligibility for the incentive and providing for a maximum royalty and tax period of 12 to 18 months. In 2007, there were 8 wells qualifying for this incentive.

In 2007, oil companies reported 56 spills. More information on spills is presented in the Petroleum Industry 2007 Spill Statistics and Report available from the branch.

The Branch continued enhancement of its GIS web-enabled petroleum resources map. The map covers South Western Manitoba including townships 1-22; ranges 19-29 W1 and shows provincial Crown oil and gas rights mineral ownership, Crown oil and gas dispositions, wells, oil and gas facilities, field boundaries and topography orthophotos. The map is available on the Petroleum website (www.gov.mb.ca/stem/petroleum).

On January 18, 2008, Canadian Natural Resources Ltd. in partnership with ATCO Midstream, opened a new 40 km gas gathering line and associated facilities at CNRL's Pierson 14-9-2-29 battery eliminating 18,500 tonnes of CO2E that was previously flared. The line and facility construction was completed in June 2007 with solution gas collection beginning in July of 2007.

The Branch participated in the following consultation and outreach activities during 2007/08:

- The 15th International Williston Basin Petroleum Conference, April 30 – May 1, 2007 in Regina, Saskatchewan. The Branch presented an update of Manitoba oil and gas exploration and development activity at this forum and met with industry clients.
- Participated in The Canadian Association of Petroleum Geologists annual convention, May 13-17, 2008 in Calgary, Alberta.

The following informational notices were issued by the Branch in 2007/08:

- Informational Notice 07-1 – Enhancements to the Well Injection Incentive – March 5, 2007
- Informational Notice 07-2 – Schedule of Public Offering of Manitoba Crown Oil and Gas Rights – July 5, 2007
- Informational Notice 07-3 – Abandonment Fund Reserve Account for Fiscal Year ending March 31, 2007 – July 30. 2007.

Administration and Geology Section

Administration

Administration is responsible for collection of petroleum revenues and administration of Crown owned oil and gas rights. The section collects annual lease rentals, Crown oil royalties and freehold oil taxes, conducts sales of Crown oil and gas leases and exploration reservations and processes lease renewals and extensions. The section is responsible for administering provisions of the Crown Disposition Regulation, the Crown Royalty and Incentives Regulation, the Oil and Gas Lease Agents Regulation and portions of the Drilling and Production Regulation under The Oil and Gas Act. The section also administers The Oil and Gas Production Tax Act and Regulation.

Crown Oil and Gas Rights - Four Crown oil and gas lease sales were held in 2007/08. Sixty two leases covering 9,530 hectares were sold for a total of revenue of $384,000. Revenue collected from Crown oil and gas lease sales was down substantially from the 2006/07 revenue of $1.4 million.

Since 1979, the province has collected over $43.3 million from the disposition of Crown oil and gas rights. As of December 31, 2006, 119,714 hectares of Crown oil and gas rights were under disposition. Of this total, Crown leases accounted for 98% and, exploration reservations 2%. Compared to 2005, the total area under disposition increased by 4.7%

In 2007, the section processed 83 lease renewals and 4 lease extensions, 52 lease surrenders, 23 transfers of dispositions and 20 oil and gas lease agent renewals and registrations. It also issued 63 new leases and discharged 3 liens.

Data Collection - The section collects monthly oil production data and data on the disposal and injection of salt water for all active wells in the province. As of December 31, 2007, there were 3022 non-abandoned wells in Manitoba. Digital production and injection histories are available for all wells.

During 2007/08, the section collected $ 17.2 million from the petroleum industry. This revenue comprised $6.0 million in Crown oil royalties, $ 10.4 million in freehold oil taxes and $0.8 million from administration of Crown oil and gas rights, fees for well licences, battery operating permits, geophysical licences, and oil and gas lease agent registration and publication sales. The revenue collected in 2006/07 was $ 20.0 million.

Manitoba Drilling Incentive Program, (1992-2009) - The Manitoba Drilling Incentive Program provides licensees of wells drilled after January 1, 1992 and before January 1, 2009 a holiday oil volume of production that is exempt from Crown royalties or freehold production taxes. The holiday volume earned is a function of oil price and location of the new well with respect to other wells.

Holiday oil volumes of up to 20,000 cubic metres can be earned by a new well.

In the fourteenth year of this program, 328 wells earned an average holiday oil volume of 2 352 cubic metres, bringing the total number of wells with a holiday oil volume in the program to 1733 as of December 2007.

Any horizontal well drilled prior to January 1, 2009 receives a holiday oil volume of 10,000 cubic metres. Forty-five horizontal wells were drilled in 2007.

Effective November 11, 1995, a marginal well where a workover is completed prior to January 1, 2009 earns a 500 cubic metre holiday oil volume. A marginal well is defined as a well that, over the previous 12 months, has been shut-in or has an average production rate of less than 3 cubic metres per operating day. Major workovers include the re-entry of abandoned wells, deepening or recompletion of existing wells from one pool to another and the repair of the casing in a well. Twelve wells earned a holiday oil volume under the program in 2007.

The Manitoba Drilling Incentive Program provides for a portion of the oil produced from a new waterflood, or other enhanced oil recovery (EOR) project implemented after April 1, 1999, which is attributed to an increase in reserves, to qualify as third tier oil for royalty/tax purposes. A portion of production from nine approved EOR projects have qualified as third tier oil.

Newly drilled injection wells, or wells converted to injection within an approved EOR project, qualify for an "injection well incentive" and a one-year royalty/tax exemption. As of December 31, 2007, a total of 49 wells had qualified for an "injection well incentive" under the program. All of the wells have completed their injection incentive period with the exception of the five wells in Sinclair Unit No. 1.

Performance Deposits and the Abandonment Fund Reserve Account – The section administers trust accounts for performance deposits and the Abandonment Fund Reserve Account. Applicants for licences or permits issued under The Oil and Gas Act are required to submit a performance deposit to ensure operations comply with the Act and regulations. These deposits are held in trust until required rehabilitation work has been completed. In 2007/08, approximately $ 1.6 million in cash, term deposits and letters of credit were administered.

The Abandonment Fund Reserve Account is established under The Oil and Gas Act. Non-refundable levies on geophysical and well licenses, transfer of well licenses, battery operating permits and inactive wells are deposited in the account. The account is used as a source of funds to operate or abandon a well or facility that is in non-compliance with the Act, where the licensee of the well or facility fails to do so. The account can also be used to rehabilitate the site of an abandoned well or facility or to address any adverse effect on property caused by a well or facility. An expenditure from the account on behalf of a licensee automatically creates a debt of the licensee to the Crown, recoverable in court.

An annual report of activities relating to the account to March 31, 2008 is available from the Branch.

Abandonment Fund Reserve Account Activity

Opening Balance (April 1, 2007)	**507,404.52**
Deposits	**189,472.05**
Levies and Penalties	179,150.00
Interest	5,384.55
Penalty of Inactive Well Levy	4,937.50
Recovery of Expenditures	0.00
Expenditures and Refunds	**10,443.06**
Closing Balance (March 31, 2008)	**686,443.51**

Geology
Geology prepares reports on Manitoba's petroleum geology and hydrocarbon potential to encourage and assist in the exploration and development of the province's oil and gas resources. A system for the designation of field and pool boundaries is maintained. As of January 1, 2008 Manitoba had 14 designated oil fields and 204 designated active oil pools. A total of 300 new field and pool codes were assigned in 2007.

In addition, Geology provides consultation and assistance to the public and the petroleum industry.

Accomplishments in 2007/08 include:

- Continued enhancement of geological formation tops data base as part of the Manitoba Oil and Gas Well Information System. In 2007, a total of 260 new wells were added to this database.
- Continuation of the Targeted Geoscience Initiative II: This project is in partnership with the Geological Survey of Canada, Saskatchewan Industry and Resources, and the Manitoba Geological Survey and the Petroleum Branch. The primary objective of the TGI project is to develop a seamless geological model of Paleozoic and Mesozoic rocks, from basement to outcrop, in eastern Saskatchewan and Manitoba. This model will integrate stratigraphic, geophysical, and hydrogeological data to enhance our knowledge of subsurface mineral potential (e.g. brines, potash), and hydrocarbon migration paths and entrapment mechanisms. This model will apply to both traditional and non-traditional areas of potash and hydrocarbon production.
- Continued to study the petroleum geology of the Devonian Three Forks Formation in southwestern Manitoba.
- Assigned Holiday Oil Volume allocations to all new wells drilled.

Engineering and Inspection Section

Engineering
Under the authority of the Drilling and Production Regulation and the Geophysical Regulation, Engineering processes drilling licenses, geophysical licenses and applications to re-complete, suspend, or abandon wells. It also issues permits for all oil and gas facilities. In 2007/08, a total of 337 drilling licenses and 19 geophysical licenses were issued. In addition, 72 technical well operations applications were processed.

The Petroleum Branch has hired a third party consultant to study the feasibility of CO2 enhanced oil recovery in some of Manitoba's waterflood pools. This project will also review the availability of CO2 in the WestMan area, the economics of developing a working flood and compare the financial regimes of other jurisdictions.

Information and advice are provided to the petroleum industry and the public at the Winnipeg, Virden and Waskada offices.

Inspection
Inspection enforces regulations under The Oil and Gas Act related to geophysical, drilling, production and pipeline operations. Specifically, the inspectors license and inspect field facilities, investigate complaints, witness specific operations, and interpret and communicate departmental or regulatory requirements to industry personnel. Inspectors are also responsible for carrying out safety and health inspections of petroleum industry operations under The Workplace Safety and Health Act. District offices are located in Virden and Waskada.

More than 1,300 wells and oil and gas facilities in the province were inspected at least once during the year. A total of 243 non-compliance orders were issued in 2007/08 for wells and oil and gas facilities not in compliance with the Act. A total of 379 flow line applications were processed and 135 excavation permits issued.

Inspectors visit all abandoned well sites to ensure that the abandonment and clean up have been conducted properly and that plant growth has been established. During 2007/08, 196 old abandoned sites were visited and 60 Certificates of Abandonment were issued, allowing for the release of wells from performance deposit requirements. The unit also manages a program of environmental protection involving the rehabilitation of all oil or salt water spill sites. During 2007/08, 65 new spills and 71 old spill sites were inspected. 48 spill sites were fully rehabilitated and released from the Branch's rehabilitation program.

Digital Information Services Section

Digital Information Services is responsible for development and maintenance of computer systems within the Branch. These systems include a diverse collection of activities such as web services, database maintenance, GIS, distribution of data to brokers, application development and document images and mapping services.

In 2007/08 the section continued to expand the offering of information available on the internet. The section provided ongoing support and development for GIS map products, Petroleum website enhancements and the Manitoba Oil and Gas Well Information System (MOGWIS).

Accomplishments in 2007/08 include:

- Hudson Bay, Helium and Oil Shale technical documents posted on the website.
- Continued support for the Oracle Petroleum Branch database and the Manitoba Oil and Gas Well Information System (MOGWIS).
- Update the Branch's technical well files on the internet.
- Ongoing support for GIS functions.
- Continued updating and enhancement of Petroleum data offerings.
- Expansion of the area covered by the well location map (printed version) to cover Townships 1 to 45, ranges 1E1 to 29W1
- Batteries and associated facilities on GIS Map Gallery (website)

Minister's and Director's Approvals

Under The Oil and Gas Act, the Minister and the Director of Petroleum have authority to issue orders relating to drilling, production, storage and transportation of oil and gas. The Minister has authority to make orders relating to well spacing, enhanced recovery, maximum production rates, seizure of wells and facilities and to enter into Unit Agreements on behalf of the Crown. The Lieutenant Governor in Council has delegated parts of this authority, under Order in Council 384/2001, to the Director where the circumstances are considered routine. The Director has authority to issue orders relating to salt water disposal, designation of field and pools, designation of new oil status and to affect the seizure of wells and facilities of a non-compliant operator pursuant to a Ministerial Seizure Order.

In 2007/08, the following Ministerial Order was issued:

Seizure Order	June 13, 2007	Ka-Bert Resources

In 2007/08 the Director of Petroleum made the following orders:

Salt Water Disposal Permit No. 193	May 23, 2007	Tundra Oil & Gas Partnership
Salt Water Disposal Permit No. 194	July 27, 2007	Apen Endeavour Resources Inc.
Salt Water Disposal Permit No. 195	November 21, 2007	Lodgepole Energy Corp.
Salt Water Disposal Permit No. 196	December 13, 2007	New Midland Petroleum Ltd.

Petroleum Industry Overview :

	2007	2006
New Wells Drilled	324	476
Oil Production	1,277,066 m^3 (8.04 million bbls)	1,239,157 m^3 (7.79 million bbls)
Value of Oil Sales ($million)	$ 613	$ 530
Average Selling Price	$480.18/$m^3$($76.30/bbl)	$395.03/$m^3$($62.77/bbl)
Wells Producing - December	2289	2209
Estimated Industry Expenditures ($million)	$300.0	$400.0

More comprehensive information and historical statistics on Manitoba's petroleum industry are presented in the Oil Activity Review available from the Petroleum Branch.

18-5(c) Petroleum

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	1,103.2	21.50	1,277.7	(174.5)	
Total Other Expenditures	363.5		365.0	(1.5)	
Total Expenditures	**1,466.7**	**21.50**	**1,642.7**	**(176.0)**	

BOARDS AND COMMISSIONS

OBJECTIVES

To provide for the resolution of disputes between surface rights holders, mineral rights, and oil and gas rights holders with respect to accessing minerals, oil and gas.

Mining Board

The Mining Board is established under the Mines and Minerals Act. The primary function of the Board is the arbitration of disputes between surface rights holders and mineral rights holders with respect to accessing of minerals other than oil and gas. The Board can also hear and resolve disputes between holders of mineral dispositions and between holders and officers of the Department.

No Board Orders were issued in 2007.

Surface Rights Board

The Surface Rights Act establishes a quasi-judicial process for resolving land access and development disputes between oil and gas development proponents and surface rights holders. The Act also establishes a Board to arbitrate and mediate disputes and establishes appropriate compensation for petroleum development activities. Land Management provides administrative support to the process and the Board.

Manitoba hosted the Western Canada Surface Rights Board Conference in Winnipeg in June 2007. The conference included representatives from all Surface Rights Boards in Western Canada. Technical papers for administrative process, law and tenure were provided as well as discussions regarding issues and trends in the oil and gas sector.

1.	Signed Agreements for Surface Leases (fiscal year)	=	351
	Total Number of Recorded Surface Leases	=	3411
2.	Review of Compensation Applications	=	0
3.	Right of Entry Applications	=	0
4.	Termination of Board Orders	=	0
5.	Application for Abandonment Orders	=	0
6.	Board Orders Issued	=	0
7.	Mediation Reports	=	0

18-5(d) Boards and Commissions

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Total Salaries and Employee Benefits	8.6		29.1	(20.5)	
Total Other Expenditures	13.2		17.7	(4.5)	
Total Expenditures	**21.8**		**46.8**	**(25.0)**	

MINERAL INDUSTRY SUPPORT PROGRAMS

The Mineral Industry Support Programs are delivered under Manitoba Geological Survey.

Mineral Exploration Assistance Program

The Mineral Exploration Assistance Program (MEAP) provides financial assistance to eligible companies or individuals who undertake mineral exploration in Manitoba. Established in the fall of 1995, MEAP was renewed for an additional three years starting with the April 2008 offering and will provide $2.5 million of assistance annually. The program was designed to increase exploration and stimulate activities that may lead to the development of new mines. Companies/individuals may qualify for 25% - 35% of eligible exploration expenditures up to a maximum of $400,000.00 per recipient, per fiscal year; depending on the area of exploration. A higher percentage of assistance is offered for projects undertaken in the Northern Superior region of the province, due to remoteness and limited infrastructure. In response to difficult times brought on by the downturn in the mineral industry, MEAP has extended the higher percentage of assistance on eligible expenditures to include the Lynn Lake/Leaf Rapids and Snow Lake areas. Two offerings are held per fiscal year.

Companies with approved projects under the April 2007 offering had until October 31, 2007 to complete their work, and approved projects under the November, 2007 offering had until March 31, 2008 to complete their work. Seventy-four of the original 90 approved projects were completed.

Reviews, Audits and Inspections

To ensure accountability and integrity of the Program, the Department continued to conduct audits and site inspections following guidelines developed with the Provincial Internal Audit office. In the 2007/2008 fiscal year, Science, Technology, Energy & Mines and the Provincial Internal Audit Office decided to forego internal audits of the program for the year due to other priorities within Internal Audit and past history of administration of the program. Five site inspections for projects representing $175,301.00 or 7.0% of the allocated assistance have been completed.

Program Highlights from October 1995 to March 31, 2008

- 157 companies have participated under MEAP of which:
  - 116 companies are considered new to Manitoba.
  - 16 are major exploration companies, and
  - 141 are junior companies (note: a company is considered a major exploration company if its market capitalization is greater than $100 million).
- $24.2 million of assistance has been issued to 660 completed projects.
- $195.9 million in exploration expenses have been reported.
- Reported exploration expenditures under the Program indicate every $1 million in assistance paid generates $8.1 million in exploration expenditures.

Mineral Exploration Assistance Program 2007 Status

Offering	*Applications Received*	Approved Applications	Proposed Exploration $ in 000's	Assistance $ Allocated in 000's	Projects Completed	Actual Exploration $ in 000's	Assistance $ Paid
07-04-02	42	42	21,660.4	1,100.0	28	11,354.6	748.65
07-11-01	49	48	44,038.9	1,400.0	46	35,530.0	1,322.6
TOTAL	**91**	**90**	**65,699.3**	**2,500.0**	**74**	**46,884.5**	**2,071.3**

Note: Projects approved under the November 2007 offering have until June 16, 2008 to file final reports and make application for final payment

Results of Assistance by General Region of Exploration for 2007/2008

	Projects		Exploration $ in 000's		Assistance $ in 000's	
Far North	4	(4.4%)	$ 148.3	(0.3%)	$48.6	(2.3%)
Flin Flon/Snow Lake	29	(32.2%)	$19,823.3	(42.3%)	$733.5	(35.4%)
Hudson Bay Lowland	3	(3.3%)	$ 1,262.7	(2.7%)	$ 107.2	(5.2%)
Lynn Lake/Leaf Rapids	8	(8.9%)	$ 7,982.0	(17.0%)	$274.3	(13.2%)
Northern Superior	5	(5.6%)	$ 1,695.5	(3.6%)	$137.0	(6.6%)
SE Trans-Hudson Orogen	0	(0.0%)	$ 0.0	(0.0%)	$ 0.0	(0.0%)
Southeastern Manitoba	21	(22.2%)	$ 4,803.7	(10.2%)	$280.5	(13.5%)
South Central Manitoba	2	(2.2%)	$ 0.0	(0.0%)	$ 0.0	(0.0%)
Thompson Nickel Belt - Superior Boundary Zone	19	(21.1%)	$ 11,169.1	(23.8%)	$490.3	(23.7%)

Manitoba Potash Project

The Manitoba Potash Corporation (MPC) holds the development rights to known potash reserves in the Russell-Binscarth area of southwest Manitoba. MPC was created in 1986 as a joint venture between the province of Manitoba (49 per cent) and Canamax Resources Inc. (51 per cent). In 1990, Canamax sold its 51% interest in the potash project, to Potamine Potash Mining of Canada Inc. (Potamine), a subsidiary of Enterprise Miniere et Chimique (EMC) Group of France, In November 2006 BHP Billiton, one of the largest diversified mining companies in the world, purchased Potamine's share in the MPC and has committed to submit a $15 million exploration plan to the provincial government within two years. A consultants report in 1986 concluded that at that time the Manitoba Potash Project had sufficient mineable reserves to sustain a world class potash mining and processing operation for over 25 years.

Acid Rain Abatement Program - Flin Flon

This program provides financial assistance to Hudson Bay Mining and Smelting Co., Limited for the construction of environmental improvements to the metallurgical plant at Flin Flon. Modernization of the plant resulted in containment of sulphur dioxide emissions within prescribed limits.

The department continued to monitor the commitments by HBM&S and administered the ancillary loan agreement between Manitoba and Saskatchewan.

Manitoba Prospectors Assistance Program

The Manitoba Prospectors Assistance Program (MPAP) offers grants to prospectors conducting exploration on either their own Manitoba properties or open Crown land. The Program is targeted at increasing mineral exploration in Manitoba to help replenish declining ore reserves. The Program is funded at $123,100 per year and allows individual prospectors to qualify for up to 50% of their prospecting expenditures incurred up to a maximum of $7,500 per prospector per year. The program also provides 80% of the cost of one return charter flight or $1,500.00 per year, whichever is less, for projects undertaken in more remote areas of the Province. The maximum assistance of $9,000.00 is available per applicant, per year.

In 2007/08 the program received 13 applications for grants; 12 prospecting projects were approved under the program and 9 were completed. The total amount of Program funds dispersed for 2007/2008 was $13,526.50.

Doug Berk	797.67
Charlie Bittern	3,708.00
Mike Camp	4,471.50
Ken de Graf	2,194.50
William Hood	362.93
Ken Klyne (3 projects)	1,758.70
John Lee	233.20
Total Funds Dispersed:	$13,526.50

18-5(e) Mineral Industry Support Programs

Expenditures by Sub-Appropriation	Actual 2007/08 $	FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
Mineral Industry Support Programs					
- Mineral Exploration Assistance Program	2,071.3		2,500.0	(428.7)	
- Prospectors Assistance Program	13.5		123.1	(109.6)	
- Manitoba Potash Project	209.7		196.5	13.2	
- Acid Rain Abatement Program – Flin Flon	24.6		24.5	0.1	
Total Expenditures	**2,319.1**		**2,844.1**	**(525.0)**	

AMORTIZATION AND OTHER COSTS RELATED TO CAPITAL ASSETS

Commencing in 1999/2000, it is the policy of the Province of Manitoba to record in the accounts of the Province, the tangible capital assets owned and used by the Province along with appropriate amortization costs. The Provincial Comptroller has established standard asset classes, along with capitalization thresholds and corresponding amortization rates.

Consistent with this policy, the department records amortization of:

- the Enterprise System allocated to departments based on projected use;
- the Desktop Management Initiative costs allocated to the departments as a percentage of total units;
- the departments share of the total estimated costs of the Desktop Management Initiative and Enterprise System Management;
- the amortization of other departmental and government assets; and
- the interest related to the assets.

18-6 Amortization and Other Costs Related to Capital Assets

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
(a) DESKTOP MANAGEMENT INITIATIVE					
Government-wide Desktop Costs	16,286.9		4,803.3	11,483.6	1
Less: Recoverable from other appropriations	(5,227.1)		(4,803.3)	(423.8)	
(b) ENTERPRISE SYSTEM					
Amortization Expense	3,457.7		3,447.6	10.1	
Less: Recoverable from other appropriations	(3,457.7)		(3,447.6)	(10.1)	
(c) DESKTOP SERVICES					
- Amortization Expense -Transition	39.9		38.5	1.4	
- Enterprise Software Licenses	92.8		92.8	-	
(d) Amortization Expense	4,481.6		8,167.1	(3,685.5)	2
(e) Interest Expense	4,258.5		4,521.9	(263.4)	
Total Expenditures	**19,932.6**		**12,820.3**	**7,112.3**	

1. *Change in capitalization policy.*
2. *Timing of completion of capital projects and change in capitalization policy.*

SCIENCE, TECHNOLOGY, ENERGY AND MINES

Reconciliation Statement

EXPENDITURE DETAILS	
2007/08 MAIN ESTIMATES	78,588.3
MAIN ESTIMATES AUTHORITY TRANSFERRED FROM:	
Enabling Appropriations	
• Internal Reform, Workforce Adjustment and General Salary Increases	2,538.3
• eco-Trust	5,749.5
2007/08 ESTIMATE	86,876.1

Science, Technology, Energy and Mines
Expenditure Summary
For Fiscal Year Ended March 31, 2008 (with comparative figures for the previous year)

Estimate 2007/08 $			Appropriation	Actual 2007/08 $	Actual 2006/07 $	Increase (Decrease) $	Explanation Number
	18-1		**Administration and Finance**				
31.0		(a)	Minister's Salary	42.1	30.2	11.9	
		(b)	Executive Support				
442.7			(1) Salaries and Employee Benefits	423.7	415.4	8.3	
81.2			(2) Other	69.5	75.3	(5.8)	
150.0		(c)	Administration and Finance	156.7	150.0	6.7	
704.9			Total 18-1	692.0	670.9	21.1	
	18-2		**Energy, Climate Change and Green Strategy Initiatives**				
		(a)	Energy Development Initiatives				
1,151.7			(1) Salaries and Employee Benefits	1,150.9	1,127.3	23.6	
2,588.6			(2) Other	2,550.0	1,046.2	1,503.8	
		(b)	Climate Change and Green Strategy Initiatives				
447.3			(1) Salaries and Employee Benefits	446.2	288.7	157.5	
3,354.7			(2) Other	482.8	354.9	127.9	
14.3			(3) Grant Assistance	14.3	14.3	-	
989.4			(4) Hybrid Vehicle Rebate Program	988.3	-	988.3	
1,992.6		(c)	Green Manitoba Eco Solutions	1,992.6	1,160.2	832.4	
10,538.6			Total 18-2	7,625.1	4,070.4	3,633.5	*1*
	18-3		**Science, Innovation and Business Development**				
		(a)	Science, Innovation and Business Development				
1,628.5			(1) Salaries and Employee Benefits	1,610.0	1,485.5	124.5	
751.8			(2) Other	744.2	859.3	(115.1)	
15,350.0			(3) Manitoba Research and Innovation Fund	15,342.5	13,547.6	1,794.9	
720.1			(4) Manitoba Centres of Excellence Fund	720.1	655.8	64.3	
(750.0)			(5) Less: Recoverable from Urban Development Initiatives	(743.5)	(750.0)	6.5	
1,952.6		(b)	Manitoba Health Research Council	1,952.6	1,952.6	-	
750.0		(c)	Industrial Technology Centre	750.0	750.0	-	
445.8		(d)	Manitoba Education, Research and Learning Information Networks	445.8	445.8	-	
20,848.8			Total 18-3	20,821.7	18,946.6	1,875.1	

Expenditure Summary

Estimate 2007/08 $		Appropriation	Actual 2007/08 $	Actual 2006/07 $	Increase (Decrease) $	Explanation Number
	18-4	**MB Information and Communication Technologies**				
	(a)	ICT Services Manitoba				
16,729.8		(1) Salaries and Employee Benefits	15,524.0	15,292.1	231.9	
56,852.0		(2) Other	59,239.6	50,565.5	8,674.1	
46,747.5	(b)	ICT Services Manitoba Recovery	(47,692.1)	(40,519.5)	(7,172.6)	
	(c)	Legislative Building Information Systems				
1,016.2		(1) Salaries and Employee Benefits	902.5	899.6	2.9	
234.3		(2) Other	216.5	178.2	38.3	
	(d)	Service Transformation Manitoba				
1,141.4		(1) Salaries and Employee Benefits	1,223.9	1,199.8	24.1	
589.8		(2) Other	530.4	533.1	(2.7)	
29,816.0		Total 18-4	29,944.8	28,148.8	1,796.0	
	18-5	**Mineral Resources**				
	(a)	Manitoba Geological Survey				
3,732.6		(1) Salaries and Employee Benefits	3,687.0	3,473.7	213.3	
1,806.6		(2) Other	1,620.0	1,605.3	14.7	
	(b)	Mines				
1,369.4		(1) Salaries and Employee Benefits	1,240.4	1,219.4	21.0	
705.3		(2) Other	589.4	489.9	99.5	
	(c)	Petroleum				
1,277.7		(1) Salaries and Employee Benefits	1,103.2	1,032.6	70.6	
365.0		(2) Other	363.5	343.5	20.0	
	(d)	Boards and Commissions				
29.1		(1) Salaries and Employee Benefits	8.6	4.4	4.2	
17.7		(2) Other	13.2	13.1	0.1	
	(e)	Mineral Industry Support Programs				
2,500.0		(1) Mineral Exploration Assistance Program	2,071.3	2,126.9	(55.6)	
123.1		(2) Prospectors' Assistance Program	13.5	47.5	(34.0)	
196.5		(3) Manitoba Potash Project	209.7	234.5	(24.8)	
24.5		(4) Acid Rain Abatement Program-Flin Flon	24.6	53.1	(28.5)	
12,147.5		Total 18-5	10,944.4	10,643.9	300.5	

Expenditure Summary

Estimate 2007/08 $		Appropriation	Actual 2007/08 $	Actual 2006/07 $	Increase (Decrease) $	Explanation Number
	18-6	**Amortization and Other Costs Related to Capital Assets**				
	(a)	Desktop Management Initiative				
4,803.3		(1) Government-wide Desktop Costs	16,286.9	4,793.6	11,493.3	
(4,803.3)		(2) Less: Recoverable from other appropriations	(5,227.1)	(4,793.6)	(433.5)	
	(b)	Enterprise System				
3,447.6		(1) Amortization	3,457.7	3,457.7	-	
(3,447.6)		(2) Less: Recoverable from other appropriations	(3,457.7)	(3,457.7)	-	
	(c)	Desktop Services				
38.5		(1) Amortization Expense-Transition	39.9	12.0	27.9	
92.8		(2) Enterprise Software Licenses	92.8	24.5	68.3	
8,167.1	(d)	Amortization Expense	4,481.6	4,033.2	448.4	
4,521.9	(e)	Interest Expense	4,258.5	3,292.1	966.4	
12,820.3		Total 18-6	19,932.6	7,316.5	12,570.8	*2*
86,876.1		**TOTAL SCIENCE, TECHNOLOGY, ENERGY AND MINES**	89,960.6	69,142.4	20,197.0	

Explanations:

1 *07/08 Eco-trust expenditures and expenditures for the Hybrid Vehicle Rebate Program*

2 *Change in capitalization policy*

Science, Technology, Energy and Mines
Revenue Summary by Source
For Fiscal Year Ended March 31, 2008 (with comparative figures for the previous year)

Actual 2006/07 $	Actual 2007/08 $	Increase (Decrease) $	Source	Actual 2007/08 $	Estimate 2007/08 $	Variance $	Explanation Number
			Current Operating Programs:				
			Taxation				
13,659	10,162.1	(3,496.9)	Oil and Natural Gas Tax	10,162.1	17,782.8	(7,620.7)	*1*
13,659	10,162.1	(3,496.9)	Sub-Total	10,162.1	17,782.8	(7,620.7)	
			Government of Canada				
-	53,819.5	53,819.5	Eco-Trust Fund	53,819.5	53,800.0	19.5	*2*
-	-	-	Community Access Program	-	200.0	(200.0)	*3*
-	53,819.5	53,819.5	Sub-Total	53,819.5	54,000.0	(180.5)	
			Other Revenue				
6,206.7	8,489.4	2,282.7	Petroleum Royalties and Fees	8,489.4	7,260.3	1,229.1	*4*
3,612.8	4,510.6	897.8	Minerals Royalties and Fees	4,510.6	3,144.7	1,365.9	*5*
84.3	163.6	79.3	Sundry	163.6	517.8	(354.2)	*6*
9,903.8	13,163.6	3,259.8	Sub-Total	13,163.6	10,922.8	2,240.8	
23,562.8	**77,145.2**	**53,582.4**		**77,145.2**	**82,705.6**	**(5,560.4)**	

Explanations:

Comparison to Previous Year

1 *Revenue has decreased due to a decline in production in 2007/08 and a decline in tax rate.*

2 *eco-Trust Funding received from the Government of Canada on 2007/08.*

4 *Revenue has increased due to an increase in royalties and lease areas.*

5 *Revenue has increased primarily due to increase in Potash royalties.*

6 *Revenue has increased due to an increase in Provincial Data Network revenue.*

Comparison Actual to Estimate

1 *Revenue was lower than budgeted primarily due to a decline in tax rate.*

3 *Revenue was lower than budgeted as funding was not received as forecasted.*

4 *Revenue was higher than budgeted due to the increased production of Crown Minerals.*

5 *Revenue was higher than budgeted due to increased rental from Potash and Surface leases and Potash royalties.*

6 *Revenue was lower than budgeted primarily due to Provincial Data Network revenues being less than projected.*

FIVE YEAR HISTORY
Science, Technology, Energy and Mines
Five-Year Expenditure and Staffing Summary by Appropriation ($000s)
For Five Years Ended March 31, 2008

	Actual/*Adjusted Expenditures									
	2003-2004		2004-2005		2005-2006		2006-2007		2007-2008	
Appropriation	FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Administration and Finance	7.00	567.0	7.00	626.1	7.00	634.8	7.00	670.9	7.00	692.0
Energy, Climate Change and Green Strategy Initiatives	19.00	2,260.6	16.00	2,234.8	16.00	3,500.3	20.00	3,991.6	20.00	7,625.1
Science, Innovation and Business Development	21.00	17,480.9	22.00	17,743.9	22.00	18,220.4	20.00	18,946.6	20.00	20,821.7
Manitoba Information & Communication Technologies	90.12	23,795.8	90.12	33,490.5	90.12	27,192.2	218.72	28,148.8	222.72	29,944.8
Mineral Resources	113.10	10,734.8	107.60	10,092.2	102.60	11,037.7	102.60	10,643.9	102.60	10,944.4
Amortization and Other Costs Related to Capital Assets		6,676.3		8,134.3		9,178.5		7,361.8		19,932.6
TOTAL OPERATING	250.22	61,515.4	242.72	72,321.8	237.72	69,763.9	368.32	69,763.6	372.32	89,960.6
Expenditures Related to Capital Investment		5,935.6		6,683.7		17,124.3		9,368.3		8,734.8
TOTAL	250.22	67,451.0	242.72	79,005.5	237.72	86,888.2	368.32	79,131.9	372.32	98,695.4

* - Adjusted figures reflect historical data on a comparable basis in those appropriations affected by reorganizations during the five years

SCIENCE, TECHNOLOGY, ENERGY AND MINES
2007/08 Annual Report Performance Measurements

This section is another step in our process to provide Manitobans with a more complete picture of the activities of government and their impacts on the province. That process was begun in 2005 with the release of the document, *Reporting to Manitobans on Performance, 2005 Discussion Document*, which can be found at www.gov.mb.ca/finance/performance.

Performance indicators in departmental Annual Reports are intended to provide Manitobans with meaningful and useful information about government's activities, complementary to financial results. Some measures incorporate data collected by the provincial government, while others show data that are collected by external agencies. A range of existing, new and proposed measures may be reported in subsequent years, as the process continues to evolve.

Your comments on performance measures are valuable to us. You can send comments or questions to mbperformance@gov.mb.ca

Ceci s'agit d'une autre étape du processus visant à ce que les Manitobains aient un meilleur aperçu des activités du gouvernement et des répercussions de celles-ci sur la province. Ce processus a été amorcé en 2005 avec la publication du document *Rapport aux Manitobains sur le rendement — Document de travail 2005*, qui se trouve sur Internet à : www.gov.mb.ca/finance/mbperformance/perf02.fr.html.

Les indicateurs de rendement dans les rapports annuels des ministères ont pour objectif de fournir aux Manitobains des renseignements valables et utiles sur les activités du gouvernement, en tant que complément des résultats financiers. Certains renseignements incorporent des données recueillies par le gouvernement provincial, alors que d'autres montrent des données rassemblées par des organismes externes. À mesure que le processus évolue, un éventail de mesures actuelles, nouvelles ou proposées pourrait être inclus dans le rapport dans les années à venir.

Nous accordons beaucoup d'importance à vos commentaires sur la mesure de la performance. Vous pouvez nous les envoyer, ainsi que toute question, à mbperformance@gov.mb.ca

Priority: Drive implementation of the Green Strategy and maximize energy & climate change opportunities for Manitobans

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	Where are we starting from? (C)	What is the 2007/2008 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
Developing alternative energy sources for Manitoba by measuring Wind Energy Production and the level of investment it is attracting in Manitoba.	Measuring alternative energy resources not only demonstrates the importance of diversifying the province's reliance on a single energy source, but it also recognizes the importance of developing clean, renewable and sustainable energy resources.	As of 2005, St. Leon has the first Wind farm in Manitoba, which was built with a $210 million private capital investment.[1]	No new wind developments have been constructed. MB Hydro is currently reviewing proposals for 300MWs of wind generated energy. Currently, the focus is on the full 300MWs of wind in the vicinity of St. Joseph MB.	MB Hydro is currently developing a process for smaller scale community wind projects on a pilot basis. Hydro has targeted an additional 600MWs of wind for development starting in 2012/2013. In total, 1000MWs of wind will result in over $2 billion in investment.	For more information, please see the press releases and reports below. MB Hydro progresses in evaluation of wind energy proposals. http://www.hydro.mb.ca/news/releases/news_08_03_31.html Province, Manitoba Hydro Unveil Expression of Interest To Develop 1,000 Megawatts of Wind Over the Next Decade – November 2005 http://www.gov.mb.ca/chc/press/top/2005/11/2005-11-21-01.html Southern Manitoba Farmers Set To Harvest Province's First Wind Crop – April 2005 http://www.gov.mb.ca/chc/press/top/2005/04/2005-04-28-04.html For more information about Wind Energy visit the Canadian Wind Energy Association website http://www.canwea.ca/ Province of Manitoba Climate Change Action Plan 2002 http://www.gov.mb.ca/est/climatechange/pdfs/final-mccap-sep-16-02.pdf

[1]The St. Leon turbine is the first of 12 test wind turbines operational as of April 28, 2005, under the federal government's Canadian Renewable and Conservation Expense program which will be used to verify wind resources. Following a successful test phase, AirSource Power Fund will oversee the construction of a total of 63 wind-turbine generators, making up the 99-megawatt (MW) project covering two municipalities in southern Manitoba

Priority: Create major opportunities for community & economic development through 'New Economy' industries and technology

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	Where are we starting from? (C)	What is the 2007/2008 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
The ability to create Community and Economic Development (CED) opportunities for Manitobans in the 'new economy' is measured by the number of communities in Manitoba with broadband or high speed Internet access.	Access[2] to Broadband is a cornerstone to economic development as it creates opportunities for Manitobans to compete in global markets, enhances education opportunities through e-learning and provides access to health care through tele-health.	Access to Broadband was limited in Manitoba and did not exist in rural and northern communities prior to September 2001.	In 2007/08 258[3] of 473[4] communities have or are in the process of acquiring access to broadband services.	A steady increase in connectivity continues within the province. This increase has been enabled by municipal groups accessing the Municipal and Rural Infrastructure Fund to provide rural and northern communities with High Speed Internet.	For more information, please see the documents below. Broadband – High Capacity Internet for all Canadian Communities (Industry Canada) http://www.broadband.ic.gc.ca/pub/index.html?iin.lang=en This measure was also reported on page 46 of *Reporting to Manitobans on Performance 2005 Discussion Document*, which is available at http://www.gov.mb.ca/finance/mbperformance/index.html

[2] Access offers local businesses opportunities to participate in a wider area of commerce. Access and a community's web presence can be viewed as a tool for gaining e-commerce, enhancing economic development, and fostering growth in key areas. By reducing and even eliminating the economic costs traditionally associated with distance, broadband communications will offer all Manitoba communities the potential to capitalize on their natural and human assets.

[3] STEM has changed its definition of connected communities. As a result, we are reporting 258 connected communities rather than the 273 reported in 2006/07. This is a change in reporting method only. A steady increase in connectivity continues in Manitoba. The figure of 258 connected communities is based on information STEM has collected on major providers in Manitoba (i.e. Broadband Communications North (BCN), i-netLink, Granite, Voyageur, MTS Allstream, the National Satellite Initiative and RFNow). Other service provides may also be providing his speed or broadband Internet access to additional Manitoba communities. STEM continues to work with service providers to refine connectivity numbers

[4] Of the 473 Communities in Manitoba, seven are large, sparsely populated unorganized districts without a population centre. It is not practical to connect these communities with high speed or broadband services. Therefore the actual number of target communities in Manitoba is 466.

Priority: Significantly improve Manitoba's research capacity and the environment for our researchers

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	Where are we starting from? (C)	What is the 2007/2008 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
The innovative capacity of Manitoba's research community, by measuring the amount of funding directed by Science, Technology, Energy and Mines (STEM) to research organizations in Manitoba.	The capacity for research in Manitoba is a key indicator of the province's competitiveness in retaining and attracting world class researchers and technologists. Investments in research and innovation spur economic development for the benefit of all Manitobans.	Total research funding by the department through the Manitoba Innovation Fund, the predecessor to the Manitoba Research and innovation Fund, was $7.0 million in 1998.	Total research funding by STEM in 2007/08 through the Manitoba Research and innovation Fund (MRIF) was $13.8 million.	Funding to the Manitoba Research and Innovation Fund increased 6.5 percent in 2007/08. MRIF funding had remained constant at $12.95 million in the two years prior to this increase.	Established in 2003/04, the Manitoba Research and Innovation Fund is the primary funding vehicle for research and innovation projects identified as a priority by the province. Manitoba's Innovation Framework is a long-term strategic plan, initiated by the Manitoba Government in 2002/03, that supports knowledge based economic development through research, innovation and technology development.. The document sets out a target of doubling Manitoba Government research investments by 2010. Manitoba Innovation Framework http://www.gov.mb.ca/est/innovation/index.html

Priority: Drive and support service transformation in Government

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	Where are we starting from? (C)	What is the 2007/2008 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
The effectiveness of government's service transformation efforts toward citizen-centered service delivery, by using a service quality index devised for the Citizens First Surveys. These surveys are conducted independently by the Institute for Citizen-Centred Service and the Institute of Public Administration of Canada.	Public demand for improved service delivery continues to escalate year over year, which means that government must monitor its service improvement progress to ensure that it is meeting the needs of its citizens.	The Provincial Government's Service Quality Score has improved since Citizens First 1 was published in 1998. At that time, our Service Quality Score was 47.	Our most recent figure is from Citizens First 5 (2008). It shows that Manitoba's service reputation has remained stable, with a rating of 53/100 on the Service Quality Score.[5] The annual report is released in the fall.	Our scores have shown continued improvement with Citizens First 2 (2000), where Manitoba's rating was 53, Citizens First 3 (2003), where Manitoba's rating was 56 and Citizen First 4 (2006), where Manitoba's rating was 57.	Visit this site to review the outcomes of Citizen First 5 http://www.gov.mb.ca/csc/servicemb/smb_gi1.html

[5] This Service Quality Score is an index based on how satisfied the public is with government services. Citizens First 5 describes five main facets of client satisfaction; they are: "knowledge," "fairness," "going the extra mile," "outcome" and "timeliness." When the public experiences these in high levels, service quality scores increase.

Priority: Find the top opportunities to lever and expand Government's ICT assets as strategically as possible to benefit Manitobans

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	Where are we starting from? (C)	What is the 2007/2008 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
Manitoba's ability to maximize the use of our Information and Communication Technology (ICT) assets is measured by the number of Public Sector entities (i.e. schools, hospitals, and crown corporations) that use the PSDN (now called the Manitoba Network) as their primary network service.	Aggregating telecommunications expenditures of government and the wider public sector will influence carriers to extend broadband services to unserved communities. Public sector entities that choose to participate will benefit from reduced unit costs, reliable service levels and consistent security provisions.	2005/06 marked our first attempt at measuring this indicator. At the time, 15 Education sites[6] and all 11 of the Manitoba Health Authorities were using the Manitoba Network under the current contract.	Currently 26 Education sites and all 11 of the Manitoba Health Authorities, which comprise 127 sites, using the Manitoba Network. In addition Manitoba Agriculture Services Corporation (MASC) has 26 sites. The total number of PSDN sites in use for government totals 226.	STEM expects the number of entities that use the Manitoba Network to increase. In December 2007, STEM created the Manitoba Network Task Force to work with public sector organizations and service providers to develop costs, funding models and implementation plan for the Manitoba Network	The Manitoba Network is a key initiative that will help meet government's commitment to ensure all communities in Manitoba have access to broadband or high-speed network services by 2010

[6] Education sites are defined as any educational facility, such as schools or post-secondary institutions, as well as administrative offices, such as school division offices, that support educational facilities.

Priority: Help expand the development of Minerals and Petroleum industries in Manitoba

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	Where are we starting from? (C)	What is the 2007/2008 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
Annual exploration expenditures by the minerals and petroleum exploration industries.	Annual exploration expenditures are the most direct indicator[7] of the level of mineral and petroleum exploration activity in the Province. One of the primary roles of the Mineral Resources Division is to promote exploration investment in Manitoba.	2002 Mineral exploration (dollar value millions) of exploration in Manitoba (annual expenditure change): $29.8 (up 3.8%) 2002 Petroleum exploration and development capital expenditures (dollar value millions) in Manitoba and millions and annual expenditure change: $56.5 (0.38%).	2008 company spending intentions on mineral exploration (dollar value millions) in Manitoba and percentage of Canadian exploration: $116.9 (4.2%). 2007 petroleum exploration and development capital expenditures (dollar value millions and annual expenditure change: $196.7 (down 11.9%) (estimate)	Since 2003 there has been an upswing in the absolute amount of mineral exploration expenditures in Manitoba, coinciding with a worldwide increase in commodity process and exploration activity. Mineral exploration (dollar value millions) of exploration in Manitoba (annual expenditure change): 2002: $29.8 (up 3.8%) 2003: $27.2 (down 7.0%) 2004: $36.0 (up 32.4%) 2005: $52.9 (up 46.9%) 2006: $52.9 (unchanged) 2007: $87.9 (up 66.2%) preliminary estimate 2008: $116.9 (up 33.0%) company spending intentions Petroleum exploration and development capital expenditures (dollar value millions) in Manitoba (annual expenditure change): 2002: $56.5 (up 38.8%) 2003: $51.8 (down 8.3%) 2004: $64.5 (up 24.5%) 2005: $126.9 (up 96.7%) 2006: $223.2 (up 75.9%) 2007: $196.7 (down 11.9%) (estimate) Continuing high oil prices and discovery of the Sinclair oil field in 2004 resulted in an upward trend in exploration and development expenditures between 2004 and 2006. The decrease in oil industry expenditures in 2007 reflected an industry trend across the Western Canadian Sedimentary Basin (WCSB). Despite the decrease, oil industry exploration and development expenditures in Manitoba are near all-time highs.	Natural Resources Canada (NRCan) reports mineral exploration and deposit appraisal statistics for all provinces and territories at http://mmsd1.mms.nrcan.gc.ca/mmsd/exploration/default_e.asp High base metal prices have lead to an increase in exploration in Manitoba over the past 3 years with Manitoba's share of Canadian mineral exploration increasing from 2.8% in 2006 to 4.2% in 2008 (estimate). Canadian Association of Petroleum Producers (CAPP) captures and compiles oil industry WCSB exploration and development expenditures by province. The expenditures exclude oil sands projects. The Department conducts an annual survey of total oil industry expenditures in Manitoba. Over the past 5 years, CAPP exploration and development expenditures have averaged 54% of total oil industry expenditures in Manitoba as estimated by the Department. Projections for 2007 are not available from CAPP.

[7] Mineral exploration expenditure statistics are public (compiled by Natural Resources Canada and Canadian Association of Petroleum Producers), unbiased, accurate, and available going back many years. They can be translated into jobs and tax revenue using information supplied by the Manitoba Bureau of Statistics. These numbers are a roll-up type indicator that reflects not only the impacts of government policy and programs, but also external factors. They are strongly influenced by commodity prices, projected worldwide supply and demand, and even weather (e.g., warm winters—and poor ice conditions—such as those in 2005-06 do not allow companies to conduct a full winter exploration program). Accordingly, such indicators cannot be viewed in isolation of worldwide trends or local developments. They are not influenced solely by government policy.

The Public Interest Disclosure (Whistleblower Protection) Act

The Public Interest Disclosure (Whistleblower Protection) Act came into effect in April 2007. This law gives employees a clear process for disclosing concerns about significant and serious matters (wrongdoing) in the Manitoba public service, and strengthens protection from reprisal. The Act builds on protections already in place under other statutes, as well as collective bargaining rights, policies, practices and processes in the Manitoba public service.

Wrongdoing under the Act may be: contravention of federal or provincial legislation; an act or omission that endangers public safety, public health or the environment; gross mismanagement; or, knowingly directing or counselling a person to commit a wrongdoing. The Act is not intended to deal with routine operational or administrative matters.

A disclosure made by an employee in good faith, in accordance with the Act, and with a reasonable belief that wrongdoing has been or is about to be committed is considered to be a disclosure under the Act, whether or not the subject matter constitutes wrongdoing. All disclosures receive careful and thorough review to determine if action is required under the Act, and must be reported in a department's annual report in accordance with Section 18 of the Act.

The following is a summary of disclosures received by Manitoba Science, Technology, Energy and Mines, Green Manitoba Eco Solutions, Industrial Technology Centre, Manitoba Education, Research and Learning Information Networks for fiscal year 2007 – 2008:

Information Required Annually **(per Section 18 of The Act)**	**Fiscal Year 2007 – 2008**
The number of disclosures received, and the number acted on and not acted on. *Subsection 18(2)(a)*	**NIL**
The number of investigations commenced as a result of a disclosure. *Subsection 18(2)(b)*	**NIL**
In the case of an investigation that results in a finding of wrongdoing, a description of the wrongdoing and any recommendations or corrective actions taken in relation to the wrongdoing, or the reasons why no corrective action was taken. *Subsection 18(2)(c)*	**NIL**

PART B - CAPITAL INVESTMENT

Capital Investment is provided in the Estimates of Expenditures under Part B. For the year ended March 31, 2008, the department's capital authority provided for the purchase of hardware and software to provide for the development of an information technology infrastructure refresh business plan. Support for internal reform initiatives involving the use of information technology in the delivery of government's services, including the Better Systems Initiative, are reported separately.

Part B - CAPITAL INVESTMENT

Expenditures by Sub-Appropriation	Actual 2007/08 $	Estimate 2007/08 FTE	Estimate 2007/08 $	Variance Over (Under)	Expl. No.
B.6(a) – Desktop Managed Environment	1,750.6		2,000.0	(249.4)	
B.6(b) – Enterprise System	4,501.2		4,750.0	(248.8)	
B.6(c) – Other Information Technology Projects	212.9		287.0	(74.1)	
B.6(d) – Corporate Information Technology Projects	2,270.1		2,296.8	(26.7)	
Total Capital	**8,734.8**		**9,333.8**	**(599.0)**	

APPENDIX A

ASSOCIATED AGENCIES, COMMISSIONS and COUNCILS

GREEN MANITOBA ECO SOLUTIONS

Green Manitoba Eco Solutions is a special operating agency of the Department of Science, Technology, Energy and Mines. The Department supports Green Manitoba Eco Solutions' objective to implement a proactive and integrated community-based model of program and service delivery focused on advancing Manitoba's strategic priorities in environmental protection and sustainable resource management. Green Manitoba tables its annual report under separate cover with the Manitoba Legislature.

INDUSTRIAL TECHNOLOGY CENTRE

The Industrial Technology Centre (ITC) is a special operating agency of the Department of Science, Technology, Energy and Mines. The Department supports ITC's contribution to economic development activities in Manitoba via an Economic Development Contribution Agreement (a performance contract). ITC provides a wide range of technical services in support of technology based economic development in Manitoba. ITC tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA EDUCATION, RESEARCH AND LEARNING INFORMATION NETWORKS

The Manitoba Education, Research and Learning Information Networks (MERLIN), is a special operating agency of the Department of Science, Technology, Energy and Mines. MERLIN tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA HEALTH RESEARCH COUNCIL

The Manitoba Health Research Council (MHRC) provides funding for health research initiatives. The Manitoba Health Research Council tables its annual report under separate cover with the Manitoba Legislature.

ECONOMIC INNOVATION TECHNOLOGY COUNCIL

The Economic Innovation and Technology Council (EITC) acts as a catalyst in establishing partnerships and alliances for increased economic development through innovation. EITC tables its annual report under separate cover with the Manitoba Legislature.

APPENDIX B

FINANCIAL INFORMATION

Science, Technology, Energy and Mines
Summary of Business Assistance
2007/2008 Fiscal Year

MANITOBA CENTRES OF EXCELLENCE FUND	**720,100**
MANITOBA RESEARCH AND iNNOVATION FUND	**15,342,500**
LESS: RECOVERABLE FROM URBAN DEVELOPMENT	**(743,500)**
TRANSFER PAYMENTS	**5,155,300**
MINERAL INDUSTRY SUPPORT PROGRAMS:	
Mineral Exploration Assistance Program	**2,071,279**
Manitoba Prospectors' Assistance Program	**13,527**
	$22,559,206

APPENDIX C

FINANCIAL INFORMATION

Science, Technology, Energy & Mines
List of Business Assistance
2007-2008 Fiscal Year

MINERAL EXPLORATION ASSISTANCE PROGRAM

Anglo American Exploration (Canada) Ltd.	36,483.00
Bison Gold Exploration Inc.	26,943.00
Callinan Mines Limited	147,210.00
Carlisle Goldfields Limited	80,702.00
Copper Reef Mining Corporation	44,398.00
Crowflight Minerals Inc.	99,293.90
Cuprus Mining Corporation	24,175.00
Endowment Lakes (2002) Ltd.	30,446.66
Falcon Crest Resources Inc.	801.24
Gossan Resources Limited	1,417.12
Halo Resources Ltd.	94,662.00
Harvest Gold Corporation	44,559.00
Hudson Bay Exploration and Development Company Limited	136,150.00
Keewatin Resources Ltd.	11,616.00
Kria Resources Ltd.	63,722.00
Lynn Lake Nickel Mining Company	94,662.00
Marathon PGM Corporation	41,391.00
Marum Resources Inc.	7,440.00
Murgor Resources Inc.	124,464.00
Mustang Minerals Corp.	43,185.00
New Britannia Mine Ltd.	41,488.00
Pegasus Mines Limited	53,174.00
Peregrine Diamonds Ltd.	155,728.40
Puma Exploration	94,662.00
Pure Nickel Inc.	82,976.00
Rockcliff Resources Inc.	41,488.00
Rolling Rock Resources Corporation	41,488.00
Strider Resources Limited	9,617.00
Tiberius Gold Corp.	48,218.00
Troymet Exploration Corp.	41,488.00
VMS Ventures Inc.	63,969.00
Western Areas NL	34,343.00
Wildcat Exploration Ltd.	80,150.00
Xstrata Nickel	128,769.00
	$ 2,071,279.32

MANITOBA PROSPECTORS' ASSISTANCE PROGRAM

	$797.67
Doug Berg	3,708.00
Charlie Bittern	4,471.50
Mike Camp	2,194.50
Ken de Graf	362.93
William Hood	1,758.70
Ken Klyne (3 projects)	233.20
John Lee	
	$ 13,526.50